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ABSTRACT

This document results from a seminar held to initiate a dialogue on the ways and means of strengthening research capacity in developing countries. The seminar participants hoped to take stock of the economic and social changes that nations around the world have witnessed in this decade. These changes have engendered shifts in educational research priorities, in the ability of individuals and institutions to undertake educational research, and in the role that educational research is assigned by the state. Divided into two sections, the first section documents the proceedings of the seminar, including a summary of the discussions that followed the formal presentations, and the recommendations for further action on educational research issues. The second section of the book contains several of the papers submitted to the seminar. This sections provides an up-to-date, comprehensive picture of educational research in developing countries. The individual research papers include one on general background of educational research in developing countries. Two papers on Africa are included, "Educational Research Priorities in Sub-Saharan Africa" (Katherine Namuddu) and "Educational Research Networking: The ERNESA Experience" (Changu Mannathoko). Three papers deal with Asia, "Educational Research in Southeast Asia" (Arfah Aziz); "Educational Research in China: An Overview of the Current Situation" (Zhou Nanzhao); and "Challenging the North-South Paradigm: Educational Research in East Asia" (Cheng Kai-ming). The last part contains two papers, "Educational Research in Latin America: Notes on Trends, Challenges, and Needs" (Jacques Velloso) and "Educational Research in the Caribbean" (Faith Wiltshire; Lucy Steward). The volume includes two appendices: (1) the seminar agenda and (2) the list of participants and representatives. (DK)

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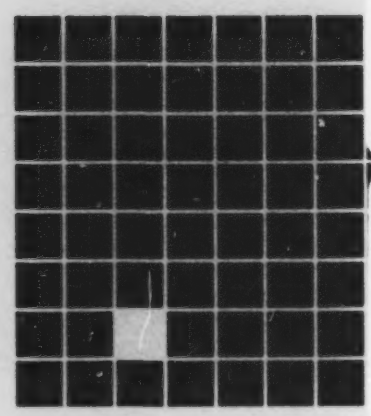

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Report of a seminar held at the
Swedish Royal Academy of Sciences
12-14 September 1991

International Institute for
Educational Planning, Unesco

Institute of International
Education, Stockholm University

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Strengthening educational research in developing countries

Report of a seminar held at the Royal Swedish Academy of Sciences, Stockholm, 12-14 September 1991

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Foreword

The economic and social changes which nations around the world have witnessed since the close of the last decade have engendered shifts in educational research priorities, in the ability of individuals and institutions to undertake educational research, and, perhaps even more significantly, in the role which educational research is assigned by the state. In order to take stock of these changes and to initiate a dialogue on the ways and means of strengthening research capacity in developing countries, a seminar was convened at the Royal Swedish Academy of Sciences in Stockholm, 12-14 September 1991. This book is one of the immediate outcomes of the seminar.

The first section of the book documents the proceedings of the seminar, including a summary of the discussions which followed the formal presentations, and the recommendations for further action on educational research issues. While a great deal of attention may be focused on this section as it relates to the possible establishment of an International Commission on Educational Research and the priorities set for it, the second section of the book, which contains several of the papers submitted to the seminar, should prove to be a valuable resource over the long term, as it provides an up-to-date and rather comprehensive picture of educational research in developing countries.

Thanks to grants from the Swedish Agency for Research Cooperation with Developing Countries (SAREC), the Swedish International Development Authority (SIDA) and the United Nations Development Programme (UNDP), it was possible to bring together a very qualified group of scholars from developing countries to discuss the status of educational research in their regions. Many of their written contributions have been gathered in this volume, as well as the recommendations and plan of action drafted by an Interim Management Group (consisting of Cheng Kai-ming, Katherine Namuddu, and Jacques

Velloso), who were appointed by the members of the seminar. Gary Miron and Karen Sorensen edited the text and provided the summary of the seminar discussions.

We want to thank the Royal Swedish Academy of Sciences for opening up their splendid facilities, the City Council of Stockholm and Stockholm University for entertaining the participants, and the staff members of IIEP and the staff and graduate students of IIE for preparing the seminar. The cooperation between the two institutions, which has a long history, has also been strengthened through this exercise.

Stockholm and Paris,
October 1991

Ingemar Fägerlind
Jacques Hallak

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List of Abbreviations

ANPEd	National Association for Research and Graduate Studies in Education (Brazil)
ANSTI	African Network on Science and Technology Information
APEID	The Asian Program of Educational Innovations for Development
ASAIHL	The Association of ASEAN Institutions of Higher Learning
ASEAN	Association of Southeast Asian Nations
ASETT	The Association of Science Educators in Trinidad and Tobago
BER	Bureau of Educational Research (Kenya)
BOLESWA	Botswana-Lesotho-Swaziland
CAE	Chinese Association of Education
CARE	Collaborative Action Research in Education
CARICOM	Caribbean Community
CARIMAC	Caribbean Institute of Mass Communication
CARRAG	Caribbean Research Review and Advisory Group
CEAAL	Council for Adult Education in Latin America
CEDO	Centre for Educational Development Overseas (U.K.)
CEPAL	Economic Commission for Latin America, United Nations
CIDA	Canadian International Development Agency
CIDE	Center for Educational Research and Development (Chile)
CRESALC	Regional Center for Higher Education in Latin American and the Caribbean
CSA	Caribbean Studies Association
DAE	Task Force of Donors to African Education
DSE	German Foundation for International Development
ECLA	Economic Commission for Latin America
EFA	Education for All
EPTA	Network of Education and Production in Theory and Action
EWP	Network for Education with Production
ERNESA	Educational Research Network in Eastern and Southern Africa
ESAURP	Eastern and Southern African University Research Project
FEP	Foundation for Education with Production
FLACSO	Latin American Faculty of Social Sciences
GTZ	German Agency for Technical Cooperation
IBRD	International Bank for Reconstruction and Development
IBE	International Bureau of Education
IDB	Inter-American Development Bank
IDRC	International Development Research Centre, Canada
IEA	International Assoc. for the Evaluation of Educational Achievement

IIE	Institute of International Education, Stockholm University
IIEP	International Institute for Educational Planning, Unesco, Paris
LARRAG	Latin American Research Review and Advisory Group
KEDI	Korean Educational Development Institute
NASO	Network of African Scientific Organizations
NCERD	National Centre for Educational Resource Development (Guyana)
NEIDA	Network of Educational Innovation for Development in Africa
NGO	Non-Governmental Organization
NIC	Newly Industrialized Country
NIE	Newly Industrialized Economy
NIER	National Institute for Educational Research (Japan)
NIES	National Institute for Educational Studies (China)
NIHERST	The National Institute for Higher Education, Research, Science and Technology (Trinidad and Tobago)
NIR	National Institute of Research (Botswana)
NORRAG	Northern Research Review and Advisory Group
NSCERP	National Steering Committee on Educational Research Planning
NTRC	National Testing and Research Center (the Philippines)
OAU	Organization of African Unity
OECS	Organization of Eastern Caribbean Council
OREALC	Unesco Regional Office for Education in Latin America and the Caribbean
READ	Researchers for Education Action and Development
REDUC	Latin American Network of Documentation and Information
RRAG	Research Review and Advisory Group
SADCC	Southern Africa Development Coordination Conference
SAREC	Swedish Agency for Research Cooperation with Developing Countries
SCME	Standing Committee of Ministers of Education
SEABAS	Southeast Asian Bibliographic and Abstracting Service
SEAMEO	Southeast Asian Ministers of Education Organization
SEARRAG	Southeast Asian Research Review and Advisory Group
SEC	State Education Commission (China)
SIDA	Swedish International Development Authority
SIER	Swaziland Institute of Educational Research
Unicef	United Nations International Children's Emergency Fund
Unesco	United Nations Educational, Scientific and Cultural Organization
UNDP	United Nations Development Programme
UNPF	United Nations Population Fund
UWI	University of the West Indies
WCCES	World Council of Comparative Education Societies
YTEPP	Youth Training Enterprises Partnership Programme

Summary of the Seminar

Overview and Summary of the Seminar

Background

Education has for some time now been removed from the favored position it once held on the agendas of development programs of Third World countries. Structural adjustments and other externally-defined plans to aid ailing economies and foster development have emphasized the productive rather than the social sector. While education has generally been considered to be of great value in promoting development, it has suffered from scattered and isolated efforts to raise its priority as a development need. Recently, however, education appears to be re-emerging as an important aspect of development. The World Conference on Education for All held last year in Jomtien, Thailand, united the world community in the espousal of "Basic Education for All", and put education back on national and international priority lists.

The diverse and extensive changes in the status and content of education over the past quarter of a century have created a host of new needs and challenges that require attention. Meeting these needs and overcoming these challenges requires the development and efficient use of research. Educational research, however, has also suffered in the past several years. Its status has been uncertain and it has functioned in a milieu of insecurity and isolation. Funds for educational research have been relatively scarce and longstanding barriers to the effective dissemination and utilization of research findings have not been removed.

Moreover, the effective planning and provision of educational services drawing on the assistance of relevant research findings assumes the favorable combination of a number of circumstances. First, an overall assessment of the present disposition of education, as well as an inventory of the existing services and needs, is required. Then, an agenda of priorities must be established and a well-considered plan of action mapped out. In the case of developing countries, it is very important that agendas

and plans are set by the countries themselves, and not by international financing bodies or donor agencies.

One measure proposed to deal with the various obstacles, and indeed with the very precarious situation of educational research itself, has been the establishment of an international group which would assess the status of educational research in the developing world, identify issues, determine priorities for research and set an agenda of joint action. The Commission on Health Research and Development, which functioned from late 1987 until 1990, provided a practical example of a collective effort to coordinate research and programming at an international level, and has been seen as a possible model for a corresponding Commission on Educational Research.

With the changing status of education and educational research as well as the model of a research commission in the social service sector in mind, a seminar on educational research priorities in developing countries was planned and subsequently convened in Stockholm in September, 1991. Organized jointly by the International Institute for Educational Planning (IIEP) and the Institute of International Education (IIE), Stockholm University, the seminar had as its aim the initiation of the process of drawing up an agenda for educational research in developing countries. (While the two institutes were to play an important facilitating role, the steering of the seminar would be handed over to the invited participants.) The need for a Commission on Educational Research was to be considered, and if established, the body's tasks and responsibilities were to be defined. The seminar was also intended to take stock of the status of educational research in the developing world and to discuss ways to strengthen research capacity.

Participants

A total of 23 persons assembled for the seminar (see Appendix II). The twelve participants were all from developing countries, originating from various parts of Africa, Asia, Latin America, the Caribbean, and the Arab States. Eleven representatives from the three agencies which funded the seminar (SAREC, SIDA, and the UNDP) and the two institutes which convened the seminar (IIE and IIEP) were also present. Many of the representatives from the Swedish groups took part on a rotating basis.

The diverse and strong educational research backgrounds of the participants, coupled with the flexible and open agenda, provided the opportunity for an effective dialogue and concrete outcomes.

Agenda and proceedings

The seminar was held at the Royal Swedish Academy of Sciences in Stockholm. Torsten Husén, as a member of the Academy and Professor Emeritus at the IIE, opened the seminar with a welcoming address, in which he outlined the history of the Academy and presented the challenges and tasks before the assembled group. After the participants agreed upon the agenda and established the working procedures for the group, the framework for the next three days was set. The participants decided that the agenda was to be flexible and open to changes, depending on the direction and progress of the group discussions.

During the first day, the research priorities in various regions of the developing world were presented and discussed. Papers on the status of educational research in Southeast Asia, Sub-Saharan Africa and Latin America were presented by Arfah Aziz (Malaysia), Katherine Namuddu (Uganda) and Jacques Velloso (Brazil), respectively. Along with these commissioned papers, a number of participants offered further perspectives on the issues in each of the regions. Presentations on the situation of educational research in China, East Asia as a whole, the Arab States, Francophone Africa, and the Caribbean were among the various contributions received. Experiences from regional educational networks were also reported. By the end of the day, the current status of educational research within the developing world had been encapsulated and the next step, that of pinpointing shortcomings, common needs and general priority areas, was ready to be taken.

For the second day of discussions, the seminar participants were divided into two working groups. A *rapporteur* was appointed for each group, and common topics (namely, critical issues of development, priority areas for educational research, and problems in the utilization of research findings) were set for the focus of the discussions. Later in the day, when the two groups re-assembled to report to the plenary, it was found that an even wider number of issues had been brought up. While the participants found it difficult to list specific research priorities, a

number of general areas which educational research should address were noted. These general priority areas included:

1. Social, cultural and economic adjustments and values. Included here is research into all environmental factors external to education, and their relationship(s) to education. These factors entail the social, economic, political and cultural contexts in which education takes place.

2. Education and the environment. This area involves the role of formal and informal education in fostering environmental awareness and environmental studies which are essential to the future of mankind.

3. Women/gender issues. This area includes gender issues, both internal and external to education: those areas which are relevant to women and girls and also those which relate to the role of women in educating future generations.

4. Minority and marginal groups. This area concerns issues related to minority groups and to marginalized and disenfranchized groups (marginal groups often make up the majority of the population within developing countries). It is these groups in society who are usually deprived of opportunities in the framework of Education for All. Research in this area might include such topics as relevance of education, alternatives to formal schooling, quality of education, and teaching and learning strategies.

5. Ecology of educational research. Research on research *per se* is considered here – the examination of all the factors and relations that affect educational research. The purposes of this endeavor are to understand the state-of-the-art of educational research and to arrive at strategies for enhancing the conditions for educational research. This area also suggests the consideration of the strengths, impacts, and general visibility of educational research.

Basic Education for All was clearly the most frequent issue raised by the participants, and developing new approaches to attain this goal appears to be an important area for educational research. Among the many other specific issues or topics mentioned, the following stand out: education for democracy; education related to work/agriculture; schools in transition; and education related to other societal concerns. At several points during the seminar, the topic of appropriate research approaches was taken up. The general consensus seemed to be that this area deserves a great deal more attention and that new theoretical and methodological

approaches to educational research which would be more suitable and adaptable to the conditions of developing countries should be considered.

Among the problems in implementing educational research, the following points were discussed in the reports of the working groups:

1. The position of educational research. Educational research is often given low priority in national agendas and policy-making is seldom based on rational educational research. Further the absence of a "research culture" prevents research findings from being appreciated and utilized.

2. The coordination of educational research. There is no definite overall research strategy in education and researchers are often vulnerable to the conflicting demands made by different agencies over time. Furthermore, researchers are seldom consulted in the process of identifying research projects and allocating resources.

3. The development, maintenance and protection of research capacity. Coordinated efforts to improve the training of researchers are required. Educational research is often carried out with less rigor and less quality control than other research. Further there is need for developing basic data bases and securing more stable mechanisms for funding research.

4. The framework for the dissemination of educational research. Research findings are not always published in accessible forms. There are serious language barriers that hinder the international exchange and mutual understanding of information, and publication opportunities are often unfavorable for researchers in developing countries.

On the second day of the seminar, discussions continued for several hours after dinner, spurred by the need to reach a consensus on the decisions to be made. Steady work and close coordination were deemed critical in order to close the seminar the next afternoon with specific plans for action and follow-up.

The last working day started with a summation of what had thus far transpired during the seminar. Following this, the participants discussed and agreed upon the idea of establishing an International Commission on Educational Research in Developing Countries. After lunch, a smaller drafting group set out to write the proposal for establishing the Commission. The plenary then met to discuss and finalize the proposal. During this last session, it was decided to name an Interim Management Group which would follow up and formalize the recommendations of the participants and their proposed plan of action for the Commission. Their

report, which was finalized three weeks after the seminar, is included in the next section of this book.

In general, the aim of the Commission's work will be to review available information on educational research, invite the preparation of specific papers, consult educational actors worldwide at different levels, and organize regional meetings and workshops where this input can be shared and commented upon. On the basis of the identification of the needs and issues of educational research, it will be the responsibility of the Commission to suggest possible research priorities in developing countries as well as likely means for pursuing and realizing them. Further the Commission should suggest strategies to improve the status and utilization of educational research.

Besides the extensive indirect outcomes which will result from the work and activities of the Commission, the following more direct outcomes are expected: (i) a final report; (ii) regional and national case study reports; and (iii) commissioned papers on international themes. While the work of the Commission is not expected to last more than two years, the Commission's impact and outputs should be of great relevance over a long period of time. Among the expected outcomes of the work of the Commission would also be an accentuation of the role of research in educational planning and better utilization of research findings. A better understanding of the research process and its relationship to policy-making should also insure coordination and a proper balance between research needs, funding and actual capacity.

While many of the participants initially expressed a concern that the seminar might only serve the purpose of information sharing, the group remained committed to doing more than just meeting and sharing. The results of the last day's work was a clear indication that this was possible. The three-day long process of sharing information, discussing issues and formulating a plan of action was a clear indication of the working approach being followed – the problem, and not the structure, would be the starting point. The proposed Commission will not be a new bureaucracy; rather, it will be a short-term authority with specific tasks. Furthermore, it is a commitment to pursue new alternatives to resolving the major problems that have long plagued the realm of educational research in the context of developing countries, and it promises to be an effective and sound course of action.

Recommendations for Further Action: Report from the Interim Management Group

Preamble

The seminar firmly recommended further action to strengthen educational research in the developing world. The participants concluded that in the last decade the progress of educational research has led to valuable insights into the nature and practice of education; in some countries and regions of the world educational research has also witnessed an improvement in quality and status. But in the same decade, the process of development has become more complex, and many environments for educational research have stagnated or deteriorated. Both trends pose significant challenges for the progress of educational research in the years ahead.

As the seminar emphasized, a thorough review of research in education is required in order to develop specific strategies for its further development. This need is based on the knowledge and experience gained in the past, the needs identified in the present, and the likely challenges to education in the future. It therefore called for the creation of an International Commission on Educational Research in Developing Countries. This Commission will be flexible and informal in nature, but with a definite mandate and of limited duration.

Such a Commission will carry out activities in support of four long-term objectives: (1) to improve research quality and improve the institutional capacity of research; (2) to facilitate the dissemination and

utilization of research; (3) to enhance the value of educational research; and (4) to foster the conduct of new and more innovative research on problems of education and development. In so doing, it will: attempt to enhance the status of both basic and applied research (the latter to be focused on how it relates to development); seek to reinforce linkages among policy-makers, planners, researchers and practitioners in education and with other sectors; and help bridge the gap between funding agencies and research communities in developing countries.

The Commission will operate with a philosophy based on open discussion, transparent operations and consultation with a broad range of stakeholders and partners in educational development. It will be independent of the governments, networks, and agencies which support it. Its members will serve in individual rather than institutional capacities. Above all, it will base its work on the knowledge and experience of researchers, institutions and networks in the developing world.

Seminar participants found it difficult to prescribe priority issues of education which the Commission should focus on at an international level. These need to be identified at regional and national levels. But they did urge that the importance of the following issues be stressed during the work of the Commission:

a) the adaption of education to rapid changes in social and economic conditions and cultural values;

b) education and the environment;

c) education for women and girls;

d) the response of education to scientific and technological development;

e) the provision and relevance of education to disadvantaged groups, which represent the majority of the population in many countries;

f) the direct utilization of research processes and results in improving the quality of education in schools and other educational programs; and

g) the ecology of educational research, its efficiency and effectiveness.

Objectives of the Commission

During the course of its life, the Commission will fulfill the following objectives:

1. To delineate the actual situation of educational research in developing countries and to identify the major barriers to its further development.
2. To assess current processes and patterns of identifying research priorities, developing research capacity, supporting research, and linking researchers and policy-makers in and across developing countries.
3. To suggest possible strategies to national governments, researchers, and funding agencies (multinational, bilateral and national agencies and foundations) in regard to:
   (i) mobilizing resources for research and developing support mechanisms;
   (ii) enhancing individual and institutional research capacity;
   (iii) increasing the visibility and utility of research to policy-makers and practitioners;
   (iv) strengthening communication among researchers and with policy-makers; and
   (v) improving the dissemination of research results.
4. To suggest possible research priorities internationally and regionally, and to present and promote alternative ways in which such priorities can be realized at national and local levels.
5. To suggest mechanisms for the further support of educational research after the Commission's work is completed.

Tasks of the Commission

In achieving the above objectives, the Commission will organize seminars, synthesize information and inititate the preparation of studies related to the various aspects of educational research. Representative tasks to be implemented in one or more regions of the developing world, utilizing existing studies and analyses to the extent possible, may include the following:

- Survey and inventory current educational research in and about developing countries.
- Identify major strengths and weaknesses in the research available, particularly as they pertain to the training of researchers, institution-building and the utilization of research for improved policy and practice.
- Describe the current magnitude and processes of funding educational research and suggest innovative funding mechanisms.
- Appraise current and possible mechanisms for communicating among researchers and disseminating research results, including the feasibility of launching new regional and international journals with an emphasis on developing world research.
- Explore ways to enhance the diffusion of translations of research reports and abstracts.
- Examine current and possible mechanisms for South-South collaboration in educational research in light of the experience of Unesco regional networks in education.
- Describe and assess the activities of national research councils, research networks, advisory groups, and data bases.
- Analyze trends and models of agency policies and activities in support of educational research.
- Assess the use of various kinds of research methods and the participation of different actors in research (including teachers and the community) and analyze their appropriateness in examining various educational issues.

- Explore criteria for evaluating the quality of research and ways to define minimum requirements (infrastructure and facilities) for carrying out research.
- Review the economic, social and political status of researchers and suggest ways to protect their independence and autonomy.

Structure, products and operation of the Commission

The International Commission on Educational Research will consist of five to seven members, depending on resources available. Members will preferably include researchers and top level policy-makers who will be responsible for selecting topics and suggesting authors for Commission studies, reviewing and synthesizing these studies, and completing the final report and recommendations of the Commission. A small secretariat, at a site yet to be selected, will include an Executive Secretary responsible for arranging consultancies and meetings and drafting documents for Commission discussion.

The anticipated output of the Commission will be disseminated to a wide audience of governments, networks, researchers and agencies. It will include the Commission's final report and synthesis of findings, selected reports that have been submitted and suggestions for specific strategies to support educational research and to further the work of the Commission through other mechanisms.

The tasks, operations, and duration of the Commission will depend to a large extent on the amount of funds available. It is anticipated that its work can be completed in 18 to 24 months. Until the Commission and its secretariat have been established, the task of organizing its preparation, planning a budget, selecting members and staff, and seeking funds has been entrusted to a three-member Interim Management Group. This Interim Group will seek and secure on its own the small amount of resources required to carry out its preliminary tasks.

The Commission will work closely with regional consultative committees, to the extent possible based on existing networks and advisory groups; these regional committees are expected to suggest ways and means to fulfill the Commission's objectives within their respective regions. It will seek support from a wide range of possible funders, primarily but not exclusively from multinational and bilateral agencies and foundations. Although independent of these agencies, it will report to them on its progress, both individually and at future meetings of the International Working Group on Education.

Educational Research in Developing Countries: Seminar Papers

Introduction

The papers included in this book provide a wide range of perspectives about the status and priorities of educational research within developing countries. This text as a whole is, however, limited in the sense that not all regions, or countries within those regions, are considered. While it seems appropriate that we should introduce these papers with an apology for their limitations, it is also fitting that we praise them, for they provide one of the most complete pictures to date concerning educational research in developing countries.

We have sought a balance between the three larger regions that make up the developing world (Africa, Asia, and Latin America and the Caribbean); nevertheless, a number of sub-regions are not represented. Perhaps most notable among the omissions are Francophone Africa and the Arab States. During the seminar, Miala Diambomba outlined the difficulties of educational research in Francophone Africa. The status and impact of educational research in this sub-region clearly differs from the Sub-Saharan region that is dealt with in two papers in this book. Unfortunately, Diambomba's written contibutions could not be included in this text due to time restrictions before publication. The challenges to educational research in the Arab States are no less significant than those facing the other areas; however, since this area is bound more by language and culture than geography, consideration of the Arab States as a sub-region presents difficulties in itself. It will be found that educational research issues pertaining to the Arab world are dealt with here *in passim* in the papers on Africa and the Asia, but more attention to the specific challenges facing this area is needed. It is expected that by the end of the work of the International Commission on Educational Research, a wider range of papers from these regions and countries will emerge and provide an even better and more complete understanding of educational research in developing countries.

The seminar provided the occasion for both a formal and informal exchange of information on the challenges facing educational researchers. While the seminar discussions revealed that the specific priorities of educational research diverge and differ extensively from one region to another, and even from one country to another, a number of common issues emerged which affect educational research in the developing world and they can be considered and dealt with as a whole. These include problems concerning the management, status and support of educational research, and obstacles to the effective dissemination and utilization of research findings. Seeking solutions collectively to resolve these issues should help the various regions and individual countries go further in determining and pursuing the research priorities relevant to their context. It is noteworthy that the seminar papers are united in support of such collective, or collaborative, endeavors.

The first paper, prepared by Jacques Hallak and Ingemar Fägerlind, provides a general background on educational research in the developing world. This paper was prepared and circulated among the participants before the seminar in order to facilitate a dialogue among the participants and to better prepare them for the inter-regional questions to be dealt with. The paper deliberately refrained from mandating specific priority areas for educational research, as well as ways and means of organizing such research. Although it proposed the establishment of an International Commission on Educational Research to explore research priorities, funding and capacity building, it did not indicate what the program of this Commission should include. The initiative for selecting and identifying research priorities remains with developing countries.

Four main issues of development are dealt with in the background paper: (1) the alleviation of poverty; (2) the promotion of democratic values; (3) the integration of environmental considerations; and (4) the achievement of education for all. Based upon these four issues – common to developing countries – the current problems and challenges facing educational research are discussed. Finally, suggestions regarding the formation of a Commission on Educational Research, as one avenue to deal with the common problems and challenges, are provided.

Africa is the first of the three general regions to be considered, with Eastern and Southern Africa receiving the prime focus. Here we have grouped two papers that present a picture of the development and current

status of educational research in the region. Katherine Namuddu's paper "Educational Research in Sub-Saharan Africa" points out the influence of the ideology of poverty on the general perception of education and educational research in the region. She notes that the scene is not as negative as "alarmists" contend, but that improvement of social conditions in Africa will involve more than injections of funds and a multiplication of research projects. Her discussion of the reasons why research, particularly indigenous research, remains "fugitive" indicates that the challenge to develop research capacity in developing countries will need to be met by innovative strategies for the dissemination of research findings.

The proliferation of educational research networks is given attention in the paper by Changu Mannathoko, which relates the history of the development of the Educational Research Network in Eastern and Southern Africa (ERNESA). The value of the network in providing data to aid in regional and national development is made evident through Mannathoko's presentation of ERNESA's training programs and research projects.

The next region dealt with in this report is Asia. Here, the particular sub-regions receiving focus are Southeast Asia, the People's Republic of China, and East Asia. Arfah Aziz presents the status of educational research in Southeast Asia, with special attention given to the role played by the Southeast Asian Ministers of Education Organization (SEAMEO) and the Southeast Asian Research Review and Advisory Group (SEARRAG). This focus allows her to discuss in some depth the role of educational research in policy-making and the need for productive interactions between government officials and educational specialists.

The next paper represents a considerable shift in perspective; from the challenges facing the smaller Asian countries in developing regional research networks, we move to a consideration of research capacity-building issues in a national context. Zhou Nanzhou outlines the structures and policies underlying educational research in the People's Republic of China, where, as he notes, 5,820 full-time researchers operate in a well-planned and highly organized arena.

Yet another shift in perspective is offered by Cheng Kai-ming, who uses the backdrop of East Asia to demonstrate how the "developing-developed" dichotomy, raises barriers to true international cooperation in educational research. His argument against the use of categories which

are artificial, and thereby conceal commonalities, is worthy of serious consideration in future discussions of international research collaboration.

Finally, the status and challenges facing educational research in Latin America and the Caribbean are treated in the final two papers in the report. Jacques Velloso presents a thorough discussion of the development of educational research approaches and institutional mechanisms in Latin America from the 1960s to the present. The special role independent research centers have played in that region is worthy of note, particularly as they have offered a chance for interdisciplinary collaboration. Namuddu's concern about "fugitive" research is echoed here, and the need to disseminate research findings to the general public, rather than to policy-makers alone, is established. If governments regard research findings as "subversive", perhaps the only way to assure that findings are translated into policies may be if a greater portion of society can set the discourse on social needs and priorities.

The background and status of education and educational research in the Caribbean area is the focus of the paper by Faith Wiltshire and Lucy Steward. They emphasize the role that a regional network for economic and social development can play in fostering regional collaboration in educational research projects.

In addition to the specific emphases that the individual papers give to different aspects of educational research, the papers each provide a useful documentation of the research priorities that have been set for the regions considered here, and many commonalities may be noted. The need for cooperative efforts in undertaking research projects and disseminating their results is reiterated in paper after paper. Individually and as a whole, the papers in this book are a valuable addition to the literature on educational research in developing countries.

Educational Research in Developing Countries: A Background Paper

Jacques Hallak and Ingemar Fägerlind [1]

Development issues and educational research priorities

In today's world, several promising trends are evident, albeit against a background of much uncertainty. These trends include the transformation of relations between East and West; disarmament and democratization; the growing importance of human rights issues – including the rights of children – in international relations; and more global co-operation in favor of environmental protection. There have been failures also. Successful attempts to promote more equitable economic and social systems are rare, and have been acutely affected by the weight of external debt, high inflation rates and the adverse effects of the deterioration in the balance of trade. The maintenance, and at times the increase, of inequality, poverty and injustice, accompanied by insufficient progress towards democracy, are a constant threat to the security of peoples and nations. Ill-founded projects to exploit ecological reserves, including tropical forests and the antarctic, counteract efforts to ensure environmental protection. The aura of uncertainty is further stirred by the persistence of local wars and political instability in many parts of the world, by the difficulties encountered in addressing major catastrophes such as floods, drought and earthquakes, and by the endurance of old diseases and the appearance of new pandemics.

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The many failures, however, must not prevent us from recognizing a fundamental trend: the underlying and growing potential for development. Looking back retrospectively, progress in some parts of the developing world has been impressive. Health status and education levels have improved; life expectancy at birth rose from 46 years in 1960 to 62 years in 1987, and literacy rates rose from 43 to 60 percent. This has strengthened human capabilities and potential. Economic growth in the developing world as a whole has also been impressive over the past three decades. On average, per capita consumption has grown by about 70 percent since 1965, and the share of developing countries in world trade has grown considerably. Where countries have managed to create effective development policies and strengthen human resources, there has been impressive progress. Development, therefore, is not a myth; it is possible, and developing countries can and will exercise a growing role in determining the future of the world.

Effective and sustainable approaches are needed, however, to guarantee this development. While all nations are unique – and no one single blueprint can be applied – a broad understanding of the basic elements of a suitable strategy is now beginning to emerge. Central to this strategy is the establishment of an environment which is conducive to the expansion and development of the capacities of each individual. In such an environment, policies would be required to encourage a supportive economic framework, and the focus of government on the alleviation of poverty would lead to a more equitable distribution of assets and income. The actions of those with vested interests in unjust systems would need to be counteracted through policies to promote democratic reforms and the development of a stronger civil society. Policies formulated in different sectors – economic, social or political – would need to incorporate environmental considerations. Finally, policies would be required to promote the development of indigenous institutional capacity for the provision of adequate social services.

In the sections which follow, four issues of development, and their implications for an education research agenda, will be considered successively: (a) alleviating poverty; (b) promoting democratic values; (c) integrating environmental considerations; and (d) achieving education for all.

Alleviating poverty

At present, one billion people – one person in five – are defined as living in extreme or absolute poverty. Poverty, as a general condition, often endures from generation to generation, and may expand in a society where the rate of economic growth is lower than that of demographic growth, or where inequitable approaches to development are adopted by governments. For example, changes in the structures of production (the transformation of a rural economy or the adoption of ill-adapted technologies) can generate poverty in industrialized as well as non-industrialized environments, and unemployment then becomes a common condition rather than an unusual phenomenon.

The magnitude of the problem is now so great that the alleviation of poverty has become one of the most challenging tasks facing governments. One part of this task is to assess and then address the educational needs of the poor through innovative schemes such as those designed to meet the specific demands of education for children at work. In addition to formal education, which will need to be adapted and made more flexible (via changes in school schedules, academic content, and the introduction of more participatory teaching-learning methods), non-formal education schemes will have to be extended and generalized to respond to the variety of educational needs of different groups. Good quality primary education for all children, and the equal participation of boys and girls, are important targets to be reached if poverty is to be reduced and significant progress made in terms of social development. The alleviation of poverty is an important element in integrated strategies to develop individuals and societies, but in order to achieve this, it is important that nations aim to create environments which are not only poverty-free, but where the aptitudes and capacities of all citizens can be applied and flourish.

Since education is influenced by and affects so many parts of society, research relating to this field can be a particularly useful tool in the development process. Educational research has the power to generate new knowledge through the application of scientific methods in the identification and solution of educational problems. To be effective, it should be carried out applying both qualitative and quantitative methods, and using multi-disciplinary approaches. Studies covering a variety of

topics, such as the following, could be valuable in helping to meet the educational needs of the poor:

- factors which influence, and ways to strengthen, educational demand;
- the relationship among health, nutrition, and learning;
- teaching-learning methods and delivery systems appropriate to working children and adults;
- the use of mother tongue in basic education; and
- the organization and administration of educational services, especially in regard to school-based management and community participation.

To deal with the problem of poverty, analysis must be done at both the macro- and micro-levels, and a study of the context must be an integral part of all projects formulated. Sociological and anthropological studies are therefore relevant for education. A focus of particular interest in these studies could be the role of education in facilitating social mobility and enhancing participation in the development process.

In very poor rural societies, studies focusing on agriculture are needed, particularly in terms of the relationship between modern and traditional agricultural methods, and how developments in agriculture and agricultural education influence social and economic structures. Studies of changes in gender roles and their implications for agricultural practices in traditional societies where women, rather than men, are the primary actors in agriculture, would also be of value.

More generally, it has been argued that projects aimed at increasing literacy among women have the enormous potential to contribute to the spread of literacy in an economic and efficient way. Studies have shown that if the mother of a poor family is literate, the children are also likely to acquire basic literacy skills, and the family is more likely to cope better with poverty than if the mother were not literate. Further research on family and community literacy and its impact on development might therefore also be useful in exploring how educational change can help to alleviate the problems of poverty.

Promoting democratic values

The political systems in many countries in our world are unstable. In Asia, authoritarian regimes have been shaken and forced to reform; in Africa, the political systems instituted after the struggle for independence are being reassessed and altered; in Latin America, a number of democratic regimes have appeared in recent years. Yet local and civil wars and social conflicts persist.

In societies where changes from mono- to multi-party systems have already taken place, where closed societies have moved to open economies with greater respect for democratic values and human rights, greater political participation may be forecast. The educational systems in these countries will face enormous challenges also. At every level and in every way, education – in its structure, administration and planning as well as its delivery systems, teaching methods, and curricula – will need to be modified. The task of preparing youth and adults to contribute actively to the social and political transition in their societies will certainly prove to be formidable. For this transition to work in many countries, Ministries of Education will have to accept that in such a rapidly changing context their responsibilities and functions will increasingly need to be shared with all other "actors" involved. These actors include citizens and non-governmental organizations who will be more "empowered" in educational affairs, implying community participation, family involvement, and decentralized initiatives designed to encourage and support the educational process.

In societies moving toward greater democracy, political instability is a dominant concern. It is important for education, in these conditions, to allow those skilled and experienced in political science to contribute to its efforts. Studies of how the structure and functions of institutions are forced to change in periods of profound reform are relevant to education, as are studies of policy-making, administration and governance. The skills of persons in this field could also be valuable for the preparation of materials and methods for civic education which becomes possible, or at least more flexible, in democratic regimes. Educational planning for situations of critical political change is becoming increasingly important.

Important topics to be included in the research agenda of newly-democratized/democratizing societies might include studies on:

a) participation in the funding and governance of educational/ training institutions (both in the public and private sectors);

b) the new division of responsibilities between Ministries of Education and other actors involved in education; and

c) school- or community-based initiatives in civic and political education, to include: the school-based design and organization of the curriculum and the use of teaching materials; and new models of teaching and learning, emphasizing individual initiative, political participation, human rights, and ethical and civic values.

Integrating environmental considerations

Since the beginning of man's existence, the question of the survival of the human species has seldom been seen as a critical issue. At the beginning of historical evidence, adapting to a hostile and incomprehensible environment was, we know, a critical problem of enormous proportion. Now, again in our time, when human potential has reached a level more loaded with possibilities than ever before, it is generally recognized that civilization, in its genius, has contributed greatly to harming this formerly all-dominating and fear-inspiring world. There is now greater reason to fear the practical supremacy of modern technology than potential destruction by unknown forces.

It is also recognized that the technological and scientific application of what may be regarded as a superior intelligence does not necessarily promote a better world. Technological progress applied in the production of arms and provisions for warfare does little to promote a more equitable world, and in societies which are war-ridden, education is forcibly focused on "education for survival".

Furthermore, as the human race fears that genius applied without a fundamental moral rationale may lead, however slowly, to destruction or at least degradation of the environment, an increased awareness of the issues at stake in the ecological debate is also apparent. It is widely acknowledged that the elevated atmospheric heat and adverse climatic changes taking place worldwide are reactions to human ignorance or

disregard. It has been estimated that close to a quarter of the earth's total biological diversity, amounting to about a million species, will be in serious risk of extinction over the next 20 to 30 years. Our largest landmasses, including two-fifths of the total land surface in Africa, one-third of that in Asia, and one-fifth in Latin America, risk becoming little more than desert. A considerable part of the vast agricultural lands of the Soviet Union are threatened by environmental catastrophe, not simply as a result of local influences, but in reaction to the contamination of both air and sea zones by masses of toxic waste and pollution caused by indiscriminate industrial practices apparent around the world.

A variety of serious and enduring problems in developing countries have created a strong and circular relationship between poverty and environmental degradation. The evidence of this relationship is so striking in cases where natural disasters have occurred, that it becomes evident that unless poverty and its root causes can be tackled effectively, environmental stress in developing countries cannot effectively be eliminated. The critical factors contributing to the extraordinary effects of natural disasters include ever-increasing population density, rapid urbanization, the lack of adequate concern for the environment on the part of either the governments or citizens, and the problematic living conditions of the poor which lead to a lack of initiative and the continued deterioration of health and sanitary conditions. Struggling to survive overrules any consideration for improving the quality of life in such conditions. While it is true that in contemporary societies, natural disasters can be forecast and their consequences reduced to a more tolerable magnitude, the reality in many poor countries is that the proposed responses are not just financially crippling, but also unsustainable over time.

It is, therefore, essential that both economic growth and environmentally sound development be achieved. This will require the integration of environmental considerations into every aspect of our economic, social and political life. Nations will have to make choices and decisions about the environment which will carry political and economic weight. The key role which education can assume in this process cannot be overlooked.

The mass media has already played an important part in drawing public awareness towards environmental problems. Environmental

education *per se*, however, is needed in order to transmit new knowledge to people, to modify their perspectives and to enable them to act in a different manner. National initiatives introduced in many countries have traditionally placed a major emphasis on the training or retraining of experts and technicians with a view to building up a body of specialized personnel to handle ecological issues. This in itself is important, but it is neither comprehensive nor viable if not accompanied by policies to develop more suitable outlooks and attitudes toward the environment, in all sectors of development and at all levels of education, across the globe.

Environmental literacy education via out-of-school activities, with the aim of encouraging people to draw upon their own resources to satisfy their basic needs, can be a powerful tool in changing human behavior. At the school level, attempts have already been made to incorporate environmental education into various subjects across the curriculum. Experience suggests that by introducing dimensions of environmental concern into science education – especially in the light of a country's or a local community's specific living conditions and problems – children's understanding of environmental issues may be enhanced, and their access to scientific knowledge improved.

The 1992 United Nations Conference on Environment and Development will provide a unique opportunity to forge a common global concern for environmental problems and for agreement on the resources and institutional foundations required to implement a program of action. International recognition of this common concern and a consensus as to how to approach it are required before decisions taken at the political, economic or educational levels can have their full impact.

To assist in this effort the education research agenda would need to include a rich tapestry of environment-related themes and topics, such as:

- comparative research on the content, method and strategies adopted in environmental education, in particular on its impact on social and individual behavior *vis-à-vis* environmental problems;
- evaluation of existing experiences from environmental education projects and of new approaches to such education;
- action research on innovative initiatives taken to make environmental education a lifelong, forward-looking process that

keeps abreast of changing environmental problems and their possible solutions;

- in areas where conditions of violence and war prevail, research on how best to adapt education to survival, both physical and psychological; and
- for populations living in areas where the risk of volcanoes, storms, floods, earthquakes and other forms of natural disasters are high, the development of new planning methodologies to ensure the rapid provision of suitable educational services.

An even broader definition of the "environment" must include the effect on societies, especially those in poverty, of disease and ill-health. The persistence of age-old diseases is devastating enough; the onslaught of HIV infection and AIDS may prove disastrous. In societies (not only in Sub-Saharan Africa but in other regions of the developing world) where ever larger percentages of both rural and urban populations, mostly those in the critical years of young adulthood, are found to be seropositive, the impact on family and community life, health care costs, educational delivery systems, agricultural practices, political stability, and human rights will likely be profound.

Here, too, the vicious cycle between poverty and ill-health is striking. The transmission of HIV infection, for example, is exacerbated by the presence of other sexual diseases, epidemic (and often untreated) in many parts of the developing world, and the infection, in turn, is triggered by a host of other latent diseases (such as tuberculosis) once thought to be under control. The health systems of many developing countries are proving unable to cope with the current burden of patients; they will be even less likely to provide widely to their populations any vaccine or treatment found effective in the next decade. Thus, with this "environmental" problem as well, education, both in and out of school, is essential in transmitting new knowledge and encouraging new behaviors. And more research on how this can best be done, in an area as sensitive as that of the sexual transmission of disease, is needed immediately. The ultimate goal which must govern studies and research on such issues as the relationship between education and the environment, the response to natural disasters, and the transmission of disease, is to contribute to enhancing the impact of education on the attitudes and behavior of individuals and societies.

Achieving education for all

Education is a fundamental issue in all world societies: one in five of the inhabitants of our planet attends classes in an educational establishment; in practically every country in the world, the teaching profession is one of the largest; and education generally accounts for 10 to 25 percent of public budgets, and in some cases up to one-third of a country's national expenditure.

In the international context, the outstanding characteristics of educational systems today are:

a) the rich diversity of in-school and out-of-school systems;

b) the changes affecting the international division of labor (which is itself increasingly determined by the quality and conditions of the utilization of human resources);

c) a scientific and technical revolution – especially in the fields of information, biology and physics – which is changing the demands being made on education and training; and

d) the tremendous gap between countries and regions of the world with regard to the access, production, distribution and control over knowledge, in an age when long-term success in any form of economic activity depends to a large extent on the emphasis given to the utilization of this knowledge.

Despite notable efforts of many countries, the following realities persist:

> More than 100 million children, including at least 60 million girls, have no access to primary schooling. More than 960 million adults, two-thirds of whom are women, are illiterate, and functional illiteracy is a significant problem in all countries, industrialized and developing. More than one-third of the world's adults have no access to the printed knowledge, new skills and technologies that could improve the quality of their lives and help them shape, and adapt to, social and cultural change. More than 100 million children and countless adults fail to complete basic education programs; millions more satisfy the attendance requirements but do not acquire essential knowledge and skills (The World Declaration on Education for All, Jomtien, Thailand, March 1990).

All societies share a common duty to improve and adapt their educational systems. This concern, however, differs in degree of importance and in form between different states, and the implications for establishing an agenda of research priorities in education will, therefore, be different as well.

Primarily in the industrial countries, but also in some areas of the developing world, there is now almost universal provision of primary and secondary education, corresponding to a minimum of 10 to 12 years of schooling. In addition, a large proportion of the youth in these countries has access to higher education and benefits from various job-training schemes or adult education programs. Five to seven percent of Gross National Product is spent on education, and in some countries this percentage is rising. And yet, notwithstanding these favorable indicators, education officials are having to contend with urgent problems.

In certain societies, the challenge is to adapt educational content and methods to the far-reaching social transformations and economic reforms that the countries have embarked on in recent years; for others, the level of scientific training is deemed inadequate for their requirements in respect of technological development and economic growth. In some countries, there is a need to devise innovative educational and training strategies in order to deal with the problems of under-privileged sections of society; in many others, the lack of simple answers to economic recession – given the latter's effect on employment and public finances – has given rise to a whole range of innovative experiments and ventures concerning the development of human resources and the financing of education, although these would appear to need still further development. Questions to be addressed by researchers and policy makers are typically:

- How can equality of opportunity be guaranteed in an educational system in which the private sector has a growing share of responsibility for education?
- How can the educational system break out of its isolation from the productive, scientific and cultural dynamism of modern society?
- What should the role of each level of government be in the organization, regulation and financing of the educational system?

The newly-industrialized countries (NICs) of Asia and Latin America have generally been successful in developing their educational systems, achieving universal basic schooling and close to 100 percent literacy rates, and training the skilled labor to meet the needs of their economies. But they still need to define the type of education that will allow them to make the transition with equal success to a level of economic and social development in keeping with the legitimate aspirations of their citizens. These countries must now urgently turn their attention to the problems of:

a) adapting more flexible and relevant educational contents and methods, as well as strategies for more active involvement by students in the learning process;

b) extending the provision of scientific and technical training at the secondary and higher education levels;

c) adopting an integrated policy for educational personnel, to enhance the professional status of teachers;

d) increasing the production and more effective use of the media in education and training;

e) supporting administrative rationalization in order to improve efficiency in the management of the educational system;

f) giving particular attention to disabled pupils and adults by developing special education programs;

g) improving the links between higher education, research and production; and

h) as in the industrialized countries, reducing educational inequalities.

Despite their heterogeneity, the middle-income countries have, on the whole, a good track record where primary and secondary schooling are concerned, with a pronounced preference for education in their resource allocation policy. But the pressures on their public finances in recent years are severely affecting their performances and multiplying the number of problems which face their political leaders. In particular, they must:

a) give priority to population groups most at risk from the crisis and which have been passed over by the educational system;

b) improve standards and conditions in primary schooling, in particular the motivation of teachers, the use of textbooks, and the adoption of bilingual, multi-cultural syllabi, where needed;

c) strike a better balance between general education and vocational training in secondary schools. A major concern is the transition from school to work of youth, especially of the 15 to 24 year old age group;

d) give full importance to the teaching of science and mathematics. The status, conditions of service and level of salaries/ remuneration for teachers in this field will need to be addressed seriously. The need for teaching materials for science teaching has become a cause for concern and should not be overlooked;

e) make greater use of the technology in the educational field (audio, audio-visual, micro-computers); and

f) redefine the role of higher education.

But government budgets are under heavy pressure, due especially to the poor elasticity of resources from taxation, exacerbated in certain cases by high inflation rates, while the problem of mobilizing alternative sources of finance is now an urgent priority, owing to the high levels of public-sector debt and the limited possibilities for the population to finance social services. In some countries, questions concerning the administration and management of educational systems and establishments need to be addressed rapidly. In others, the need is for new forms of adult education and for new approaches to basic education, so as to render them more relevant to the needs of their citizens in terms of health, nutrition, environment, and productivity.

The least developed or the poorest countries (in Sub-Saharan Africa and Southern Asia) suffer from an accumulation of problems of finance and human resources at a time when the needs of their educational systems, already hard-pressed, will continue to grow rapidly in the coming years. High illiteracy rates and low primary schooling rates, combined with ineffective schooling and low educational standards, ought to spur officials to give priority to the goal of education for all. In particular, it is essential:

a) to find new ways to generalize primary education with a view to securing irreversible results on the educational and literacy

fronts, while reducing gender-based inequalities in education;

b) to train the manpower that is indispensable for the development of rural and urban areas;

c) to strengthen science and mathematics teaching at all levels;

d) to encourage communities to contribute to the financing and control of the educational services offered;

e) to improve the management and administration of the schools; and

f) to improve the role of teachers by means of incentives related to their qualifications and the performance of their duties.

In most countries in this group, per capita income has grown by only 0.6 percent *per annum* between 1965 and 1980, and by 0.4 percent *per annum* between 1980 and 1986, to barely US $200 in the latter year. These countries spend the lowest percentage of GNP on education (three percent on average), and practically their entire population is dependent on the public sector for financing its essential social needs. A vast program of educational reform could not even begin to be implemented without a significant mobilization of international funds to supplement national budgets.

Current challenges for research and a proposed strategy

The context of educational research

Strengthening research and analytic capacity in education is an essential requirement for the improvement of educational systems. Educational policies and practices, and the decisions taken regarding them, must be informed by the results of systematic, well-conceived research, evaluation, and assessment.

Much progress has been made in achieving this goal in the last decade or so. The sheer number of researchers, research institutions, and research training programs has increased dramatically. While many once-strong research centers have waned in influence, others have grown to become the focal points of dynamic research environments, often in collaboration with national, regional, and international networks. New technologies have helped to increase the efficiency of collecting,

analyzing, and disseminating information. Many donors have begun to realize the importance of the *development of local (as opposed to* expatriate) research capacities, more flexible training models, and the long-term, sustained strengthening of everyday research and analysis *processes* (rather than the rapid production of "good quality" research *products*). In some countries, also, research in itself is a more valued activity than in the past, sometimes merely to rationalize decisions after they are made, but more and more often as the basis for new policies and practices.

But much more still needs to be done, not least because of new factors that are affecting the educational research environment. Some of the more significant factors – poverty and the deterioration of many education systems, democratization and the growth of civic society, and the degradation of the environment – have already been mentioned. Others, however, are just as powerful. These include trends toward decentralization, devolution, and community involvement in development (often brought about by the inability of governments to provide services once available or currently demanded); the negative effects of new technologies in terms of how the inequitable control of them, and access to them, often constrain rather than empower their users; and the increasing need to take into account gender issues in development, in terms of the topics to be examined, and the research frameworks and methods to be used.

The persistent development problems of the past and those which have appeared more recently combine to make the challenge of strengthening educational systems and processes a daunting one. The ability of educational research and analysis to assist in meeting this challenge, however, is hindered by five major problems:

*1. **The problem of data and the available information base.*** In some countries there is an absolute lack of data on the size, quality, and costs of their educational systems. In others, there may be too much data but not enough of it used appropriately and effectively (selected, analyzed and packaged) as "information" for decision-making. Without such data, accurately collected and rapidly processed, educational policy analysis and decision-making will inevitably remain ill-informed.

2. ***The problem of human resources.*** As with data, some countries suffer from an absolute lack of skilled researchers and viable research centers, or of particular skills at various levels or units of the system. Others under-utilize the human resources available, often preferring instead the expatriate consultant, and thus provide little support to their own researchers.

3. ***The problem of institutionalization.*** Insufficient and/or unsustained funding, the lack of political support, and the general deterioration of academic infrastructure have hindered the establishment of strong and permanent structures of research and analysis – with adequate staff, physical and technical facilities, libraries, data bases, career structures, and the sheer opportunity for full-time research and even the ability to assemble the teams of researchers required for particular tasks – and the "routinization" and sustained support for the research process as a vocation. Networking between researchers and institutions in the same country or region, and between regions in the South or on a North-South axis, may be a useful way of encouraging such institutionalization, but can flourish only when based upon some minimum critical mass of human and material resources.

4. ***The problem of appropriate research frameworks and methods.*** Although there are no "Northern" or "Southern" paradigms *per se*, there are definitions, assumptions, conceptual frameworks, and methodologies which may be more or less appropriate to the priorities and conditions of a particular context. Varieties of approaches to collecting and analyzing data, including probability samples, non-random samples, and ethnographic/anthropological approaches, therefore need to be developed and adapted to deal with the wide range of problems and decisions facing educators in the developing world.

5. ***The problem of demand.*** Even when such resources may be available, the demand for the results of educational research may be weak. It may exist in some unchannelled form from parents concerned with the quality of education received by their children, and perhaps from donors concerned with feasibility studies and evaluations related to their own particular projects. But the more nourishing demand for information from those who act within the system – policy-makers, planners, and practitioners – may be very limited.

These problems are compounded by the point that research priorities and the kinds of research and policy analysis skills related to them can differ quite markedly at various levels and parts of the system; this fact makes clear the need for a pluralistic, multi-level approach to capacity-building. Certain kinds of capacity are required at the school and classroom level, where useful adjustments in teaching and learning can be initiated easily, and perhaps at the community level as well, where members might be helped to participate in local needs assessment and school priority-setting. Different kinds of capacity are required at the inspectorate level; at operational and policy levels within Ministries; at institutes for basic research, social science research, and teacher-training; and in government and non-government organizations. In addition, in a world which is larger in real terms than ever before as a result of the increased knowledge and ease of communication, it is increasingly important that countries are able to compare their national situations with those prevalent abroad. This, too, requires a particular kind of capacity in research.

Given such a variety of contexts and of required capacities, and in order to ensure that research can be used to ensure informed decision-making at each level of the system, it is necessary that educational research priorities be determined locally (rather than by donor agencies or international bodies) and that a proper division and mix of responsibilities for research and policy analysis among various actors in the system be clearly established. For example, a general research policy (priority topics, funding arrangements, links with central policy formulation) is most usefully set at the national level, to address issues of concern to the entire system and to ensure correlation with any regional requirements and international concerns; systematic and up-to-date data bases will also be required at this level. But some division of labor will then be necessary between national and local levels in regard to the primary responsibility for issues such as experimentation with school innovation, the control of school and system quality, the assessment of individual learning achievement, and the evaluation of instructional programs. This implies that each level of the system will require qualified research personnel and therefore appropriate training programs.

The challenges of strengthening educational research are considerable and complex. Progress has been made in many areas, but

much of this is piecemeal, fragile, and dependent on the continued support (financial and otherwise) of donor agencies. Although the building of more systematic and sustainable research capacity has been discussed for over a decade, and although many donors appear committed to continuing to assist in this effort, sustained and renewable capacity is not likely to occur until local, national agencies (from governments down to parents) begin to demand more, and more accurate, information about their educational systems.

A commission on educational research for development

It is suggested that one way to build such demand, strengthen consensus on the value of research, examine more analytically the "state" of research, and propose and promote ways to enhance it, is to establish an International Commission on Educational Research for Development.

Such a commission, modelled on one established for health research in 1987, might have several objectives:

1. To survey and inventory current educational research in and about developing countries, and identify major strengths and weaknesses in the research available.
2. To collect and synthesize inputs from researchers, policy-makers, funders and practitioners from throughout the world concerning the actual situation of educational research in developing countries, the major barriers to its further development, and suggested needs and priorities for its improvement.
3. To assess current processes and patterns of identifying research priorities, developing research capacity, supporting research, and linking research and policy-making in developing countries.
4. To suggest possible research priorities internationally and regionally and recommend ways in which such priorities can be established at national and local levels.
5. To suggest methods for the enhancing of individual and institutional research capacity and for the strengthening of linkages among educational researchers, policy-makers, and practitioners.

6. To enhance the status of educational research among policy-makers, practitioners, and "consumers" of education, as well as donors, and mobilize resources from these various sources for research and research capacity-building activities.

In achieving these objectives, such a commission would have several tasks: (a) to commission background papers and specific topic papers that examine themes of relevance to developing countries, as well as case studies on educational research in particular countries and regions; (b) to arrange and oversee regional and sub-regional commission meetings, as well as a number of regional workshops on more specific topics. These meetings could include an array of persons: educational researchers, national policy-makers, local and international experts in education and development, representatives from donor groups and NGOs, etc.; and (c) to complete a final report of the work and findings of the Commission (this report should present an overview of the situation of educational research in developing countries and present a plan of action complete with areas of priority and specific recommendations).

It is suggested that, like the Commission on Health Research, the Commission on Educational Research could be made up of recognized scholars, researchers and policy-makers. Such a Commission should be composed predominantly of representatives from developing countries (two-thirds or more). The Commission members would represent different regions of the world and to some extent different disciplines inside and outside the field of education. Some members would be appointed as "Regional Commissioners" whose responsibilities would be to ensure an adequate coverage of specific conditions in different regions. An equal representation of female and male members should be sought.

The Commission would be an independent body, not tied to any particular country or agency. Rather, it would act on behalf of the donors that support it and the members that make up the Commission itself. The duration of the Commission's work might be expected to be two years.

The Commission would, therefore, be composed of:

1. A panel of several members including a Chairperson and three Regional Commissioners, one each from Africa, Latin America and Asia.
2. A small secretariat in charge of organizing the meetings and the missions and contracting the services of corespondents and consultants. The secretariat would be attached to the Chairperson.
3. Regional, technical secretariats attached to the three Regional Commissioners. Each technical secretariat would include one to three specialists/consultants, who could monitor substantively the work of the Commission in the region, and two administrative/support staff.
4. A Steering Committee composed of representatives of government, the sponsors, a selected number of institutions engaged in educational research, and existing regional and sub-regional professional networks such as the Unesco regional networks on innovation in education and the Research Review and Advisory Groups (RRAGs).
5. A panel of consultants to serve upon request to carry out the required studies and document the work of the Commission.

Besides the direct outcomes that would result from the work and activities of the Commission (the final report, national case study reports, commissioned papers on international themes), other more intangible outcomes might be expected. These might include a stronger consensus concerning the value and utility of educational research; expanded resources, from both national and international sources, for educational research; decision-makers, planners, and practitioners, as well as donors, more sensitized to the potential utility of such research; stronger linkages within and across research communities and institutions and between them and policy-makers; the strengthening of individual and institutional research capacity; and a more systematically planned agenda for research.

Educational Research Priorities in Sub-Saharan Africa

Katherine Namuddu [1]

My original mandate in this exercise was to write an informal paper on the research priorities for educational research in Africa. However, aware of the considerable limitations in my knowledge regarding not only the status of educational research, but also the nature of the educational systems in North Africa, I immediately decided to truncate the continent to Sub-Saharan Africa. But even here I came across three major difficulties.

First, East Africa has not generally been exposed to research literature from South Africa. Much of my somewhat casual and eclectic acquaintance with the nature of research and the educational system in that part of Africa has been garnered from the mass media. Undoubtedly, the integrity of such information has often been a subject of intense debate. Second, we in the middle part of Africa have had a long tradition of assiduously sustaining an intellectual divide between Anglophone and Francophone Africa. We generally lack an adequate understanding of the nuances of the cultural, social and political environment for research which, as we have come to learn through somewhat slow and painful plodding, contributes more to the status of research in any country than factors such as the quality of training in research and the quantity of resources devoted to research. Third, as is so frequently repeated, there is a serious problem of communication and dissemination of information on educational research and its products all over Africa, within and across countries and institutions. For this reason every African writer and

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researcher, as will be discussed later in detail, is seriously handicapped in obtaining and retrieving information. In any case, readers will need to keep in constant view Coombe's (1991:1) recent discovery that *even just* "Sub-Saharan Africa is endlessly diverse."

Research on educational research in Africa

The status of educational research in Sub-Saharan Africa has periodically been reviewed by a number of organizations such as International Bank or Reconstruction and Development (IBRD) in 1980 and IDRC in 1983 (Shaeffer and Nkinyangi, 1983) and Unesco in 1990 (Yoloye, 1990). The results of these reviews have been influenced by two important factors: first, since surveys of research on educational research at the national, regional and continental level have typically been initiated and commissioned by international funding agencies, data has been collected according to questionnaires prescribed by these agencies. As a result, those responsible for undertaking this task have always attempted to fit whatever information they could find to the "general pattern" already perceived from the donor agency perspective. Second, data from such surveys have been derived for purposes of making international comparisons, so that the results are ultimately compared to the situation obtaining in the industrial North.

Notwithstanding these two factors, these surveys do clearly reiterate the critical shortcomings in the status of educational research in Africa. For instance, the problems of information retrieval are well-articulated in Yoloye's contribution to Unesco's *National Education Research Policies: A World Survey* (1990) which sets out to summarize the situation for the whole of Africa. First, only 17 (36.6 percent) of the 45 member states of the OAU replied to the questionnaire sent to them regarding national education research policies and priorities. Second, within most countries, a particular individual was given the responsibility of responding to the questionnaire. There was a tendency to give fuller information on the institution where the respondent was based, while other institutions got cursory treatment, if they were treated at all. Yoloye summarizes available information on the organization and management of research in education, treating the determination of research priorities, the establishment of research policies, and the dissemination and utilization of research findings, according to the guidelines given for the preparation

of the present paper. In this paper I present a somewhat different perspective on the status of educational research, from which I subsequently derive what I think are the priorities for educational research.

Leading problems in African education

Senteza-Kajubi (1990), a long-time educator in Africa, has stated that there are three leading problems in African education:

1. There is a lack of a clear and sharp picture of what kind of person we would like to see in respective countries and hence what kind of society we would like to develop. As a result, the goals of education, expressed in global terms, have no clearly defined relationships to learning activities that preoccupy the daily schooling process.
2. The formal philosophy and organization of the educational system have remained predominantly foreign.
3. The education system is inefficient as evidenced by: a persisting shortage of both qualified and properly trained teachers; school wastage and relapse into illiteracy; regional and gender disparities in participation and achievement; and overall illiteracy in the population.

Yet, what is the relationship between these characteristic problems of educational systems in Africa and existing research?

The discussion in this paper is based on the belief that the real and most fundamental problem in education in Africa is what Senteza-Kajubi has described as a philosophy and organization which is predominantly foreign. The other two so-called problems are simply manifestations of the adherence to an unsuitable organizational pattern of education. The largest proportion of existing research, referred to in this paper as foreign-inspired research, has been preoccupied with the application of various cures to these manifestations or symptoms without first ascertaining the nature of the disease. A minor proportion of the research, referred to as indigenous research, has attempted to understand the nature of the disease, but its prescriptions for a cure have been persistently disregarded because of historical, economic and political factors. In order to identify meaningful research priorities, it is important to understand how the confluence of these factors has determined the status of existing research.

Traditional descriptions and conclusions with regard to the status of educational research in Sub-Saharan Africa – in terms of what research exists and how much there is, whether or not it is of high or low quality and of relevance to the needs of the educational system, its organization and management, the dissemination and utilization of findings, and the determination of research policies and priorities – have, in my view, been critically influenced by factors more related to the ideology of poverty than to the nature of existing research. And it is with an explication of this ideology that I begin presenting the landscape of educational research.

The influence of the ideology of poverty

In a recent paper on repetition and school dropout in Mozambique, Palme (1991:47) states succinctly the essence of the ideology of poverty, namely that: "The poor are also poor in so many other ways." Palme illustrates his statement with the following explanation of why Mozambican peasants do not intervene whenever schools mistreat their children: "Peasant families have so little of the legitimate cultural competence, they rarely feel themselves to be in a position to criticize school or take action when conflicting views exist on problems linked to school."

It is extremely important to note that Palme, just like many other researchers, donors, educators and policy-makers, does not state that "peasant families *are considered* to have so little of the *so-called* legitimate cultural competencies". It is taken as reality that peasants do not have the competencies, and that knowledge from school is the only legitimate cultural competence needed to intervene in school affairs. No room is left for doubt. Therefore, peasants, as long as they do not gain access to material resources and competencies in school, will remain poor and, consequently, incapable of contributing to the debate on schooling. One might ask: how do peasants know that they cannot contribute? Obviously, they are frequently told that they do not have the knowledge and skills, just as Palme points out.

The ideology of poverty has three fundamental pillars:

1. It is constructed on the notion that there is a direct link between the ability and capacity to generate useful information and the possession of material resources. Therefore, if one lacks the recognized quantities of resources, both human and material, as

inputs, whatever outputs are garnered are not recognized as *useful*.

2. It thrives on itself and is self-perpetuating. Refusal to recognize as useful information obtained outside "the system" is regarded as sufficient evidence that such information does not exist.
3. The ideology is constantly preached.

This is an important dimension to the sustainability of the ideology of poverty. Just as the peasant is constantly reminded that he does have the knowledge and, therefore, takes no effort to intervene or, indeed, to find out what his interest in the matter ought to be, Sub-Saharan Africa is constantly bombarded with information and policies designed to dramatize ever more clearly the crisis in the state of its resources. As Odhiambo (1988:9) eloquently points out in describing the nature of the economic crisis in Africa: "It is therefore not surprising that there are few voices within Africa or outside it which contain a positive message for Africa". How in practical terms does the ideology of poverty translate to the landscape of educational research in Sub-Saharan Africa?

The voices within and outside Africa which contain a persistently negative message have exploited the ideology of poverty to the full by repeatedly claiming that: (1) Sub-Saharan Africa does not have adequate research capacity in education and policy analysis; (2) Africa does not have adequate capacity to preside over reforms in education; (3) the quality of educational research emanating out of Africa is poor; (4) Africa does not have adequately trained human resources to plan, manage and administer educational research institutes and other educational institutions; (5) there is little or no research on the major structural, organizational and policy initiatives in educational systems in Africa; (6) research results are not available when needed; and (7) research tells us little or nothing about what is happening in African education.

Development literature on Sub-Saharan Africa is replete with many more statements with similar claims. The credibility of such claims has more recently been galvanized into two main documents by the World Bank, namely: *Education in Sub-Saharan Africa: Adjustment, Revitalisation and Expansion* (1988) and *Sub-Saharan Africa: From Crisis to Sustainable Growth* (1989).

While I would not like to give the impression that all is well in Sub-Saharan Africa in so far as educational research is concerned, I would like to argue very strongly that the landscape is much more positive than the alarmist portrayals with which we have become altogether too familiar. What has happened is that both the conduct and assessment of research on educational research in Sub-Saharan Africa has traditionally started from the wrong premise, namely that institutions are the locus of research.

In the developed world, the singular feature of all research is its institutional nature. And yet, this has not always been the case. Recognized research institutes and institutions, as well as a coherent research community presiding over various educational disciplines is a somewhat recent phenomena on the time scale of research in the North. Since the beginning of the twentieth century, there have been clear policies to move research away from the monopoly of individuals and locate its activities within institutions. This relocation has been a product of the increasing democratization of educational activity and the reconceptualization of the scale of research itself.

When the premise of institutional locus is imported, stripped of all its historical context, from its appropriate environment in the North to Sub-Saharan Africa, the results are the sorts of statements quoted earlier. But it is not just the premise that we should find educational research concentrated in recognized institutions in Sub-Saharan Africa which is fundamentally wrong. Equally erroneous is the assumption that since high quality educational research in the North is now best conducted under the auspices of institutions, it is only if and when similar institutional structures are put in place in Sub-Saharan Africa, staffed with highly-trained researchers and equipped with computers, other technology and resources, that the results of research will be of good quality.

Those who wish to obtain a more balanced understanding of the landscape of educational research in Sub-Saharan Africa need to assess information and research on educational research from a slightly different perspective. This perspective is based on two assumptions, namely:

1. The two types of educational research, i.e., foreign-inspired research based in institutions and indigenous research, mostly extra-institutional, are dictated by different motives which originate from a quest to influence the course of educational development in Sub-Saharan Africa.

2. In describing the status of educational research, what requires inquiry is not simply what is claimed to be and not to be, but also the motives behind the various claims and actions.

Foreign-inspired research seeks to perpetuate the predominance of a foreign philosophy and organizational patterns by insisting that what countries in Sub-Saharan Africa lack in order to raise the quality of education are: adequate instructional resources and facilities; adequately trained and motivated teachers who are well-remunerated and who can use data management systems to extract the information they need; sufficiently trained planners and managers; and well-designed assessment systems, all of which should be obtained by importing existing models of educational development practiced in the North.

Indigenous research seeks to perpetuate more or less the same foreign dominance in education, but it has an added ingredient. Much of indigenous research during the ongoing transition from colonialism to the creation of a new social order is basically a tool designed to expose the contradictions (or departures from the expected Northern orientation) within the emerging post-independence social, economic and political environment. It is, therefore, regarded as a form of opposition by the dominant groups in either government or in external donor agencies and is hidden from the public domain and debate. Let me, by discussing the issue of who conducts research and why, elaborate on these two assumptions.

Who conducts educational research?

Who conducts research is linked to issues of motive and funding. Before independence much of the foreign-inspired educational research in Sub-Saharan Africa was conducted at universities and in ministries of education and was adequately funded by governments and external foundations. The largely expatriate staff undertook research and exploited to the maximum departmental budgets and facilities, and created and sustained an infrastructure for research. African members of staff were generally juniors who acted as mere functionaries in the research process.

Immediately after independence, there was a major shift in funding research, partly because of the kinds of people who now occupied institutions of research and partly because of the emerging sociopolitical

processes, both locally and at the international level. First, the need to "Africanize" the teaching staff at universities as many expatriates left meant that foundations such as Ford and Rockefeller which were interested in assisting in capacity-building had to invest substantial resources in training Africans abroad and, therefore, devoted fewer funds to supporting research in Africa.

Second, the priority of newly-independent governments was to expand access to education at all levels for a larger proportion of nationals who, until then, had either been denied access or had not been allowed into tertiary education. Therefore, government research budgets were slashed to almost nothing. However, these cuts were made not because governments lacked an appreciation for the importance of research. Rather, within the range of the immediate priorities of expanding access and enrollments, putting in place crash programs for teacher training and administrative personnel and writing new, localized curricula – all conducted within the constraints of wooing a jigsaw of new and fragile political constituencies – meant that educational research did not figure prominently as an immediate concern.

Consequently, African researchers were forced to seek independently, rather than as institutions, external resources for indigenous research. The competitive nature of the funding process, coupled with the fact that African researchers had taken little part in presiding over the building of the pre-independence research infrastructure, resulted in the failure of educational research activity to take on a strong and recognizable institutional base.

Sometime in the mid-1970s, the World Bank acquired a dramatic capacity for analyzing educational systems in Sub-Saharan Africa. This unprecedented but systematic and steady move into the field was presided over by directors with an ambition to achieve an important goal. The lack of big money to fund research conducted by expatriates in Africa, as well as a general political climate which was inhospitable to foreign researchers, had created a knowledge vacuum which the Bank felt was to its disadvantage as a money-lending institution. Compiling systematic information and data would enable the Bank to create a rationale for more lending to education. Therefore, when in 1988 the World Bank published its report, more people were ready to listen, although there were some researchers in Sub-Saharan Africa who organized for protest.

The protest by African researchers centered around the nature of the exhaustive consultative process which the Bank insisted it had engaged in during the production of the report. For instance, the Educational Research Network in Eastern and Southern African (ERNESA), which met in Swaziland in early 1987 and which had members in 15 countries, wondered aloud which researchers had been consulted if the network had not been involved. One of the complaints from the network was that the Bank's report tended to stress the economic aspects of education without taking adequate account of the sociopolitical problems which had resulted in the stagnation of the economy in general and the educational system in particular. Researchers argued that the Bank's recommendations, particularly on adjustment, would result more in distortion than reform because the consultative exercise had failed to look for and use original sources for indigenous research literature and had merely relied on citations from UN agencies, its own researchers and a few researchers outside Sub-Saharan Africa.

Protesting African researchers and others who were unhappy with the World Bank report and its overall approach to educational reform in Sub-Saharan Africa were soon to learn that theirs was a minority voice, and clearly an insignificant one, within the overall emerging processes of reforming African education. By the time the Bank published its report in 1988, it had already and for quite some time, successfully managed to determine the nature of the debate about education in the developing world (King, 1988), not only in the Bank but also in virtually all donor agencies and industrialized governments. These agencies and governments were already relying on the World Bank, and not on the uncoordinated and muffled voices of African researchers, for advice in identifying areas for assistance to African education. Consequently, the Bank seized its lead and took another unprecedented initiative to organize what is called the Task Force of Donors to African Education (DAE). Effectively, the Bank mobilized donor opinion to focus attention on a series of "educational crisis areas" such as higher education, mobilization of resources, examinations, vocational education, textbooks, teaching and instruction, educational statistical data collection and analysis, and, later on, educational capacity building and gender issues.

These initiatives have had significant consequences for the funding and conduct of educational research in Sub-Saharan Africa. Some funding

agencies, through their loans and grants to education, carry out a great deal of collection, analysis and interpretation of educational data through consultant missions, project identification activities, sector-studies, pre-investment studies and, occasionally, some through project evaluation work. This large quantity of research is often conducted by expatriate consultants within short periods of time in order to provide the rationale for funding specific projects. Often when such funding agencies undertake an educational project, a number of research projects are usually incorporated. These projects are usually earmarked to be carried out by local researchers.

Unfortunately, it does not appear that many of these funding agenicies insist on the same amount of rigor in conducting and completing in-project research activities. What is clear is that some of these funding agencies' own supported research, which is typically foreign-inspired in terms of project identification, implementation and completion, rarely provides ample opportunity for local researchers to be involved. In addition, the practice of building research activities into loan and credit projects dissuades governments from borrowing specifically for educational research, and, therefore, limits both the commitment of governments to research and to the institutionalization of a strong research capacity and infrastructure with planning units in ministries of education and other institutes where indigenous research could be conducted.

It seems that more and more, funding agenicies are now following more or less a similar approach, employing expatriate consultants to undertake project identification missions and project evaluation studies. While these agencies may try to involve a few local researchers, these must in most cases operate through links with expatriate researchers based in Northern universities. This collaboration, as it is referred to, is often a dubious undertaking and a painful experience to African researchers, many of whom participate in it simply because they have no alternative if they want to improve their professional careers. In any case, much of this research is foreign-inspired and lacks the perspective of the countries under consideration.

The economic and political environment and indigenous research

Ultimately, the most critical factor which has influenced the development, survival and invisibility of indigenous educational research is not funding

but the emerging broader economic and political atmosphere undergirding the total research environment. Post-independence governments and politicians, strongly abetted by donors, have perceived education as the single most important instrument in bringing about equal social and economic opportunities for all (Namuddu, 1991c). In addition, governments faced with warring factions within their own ranks have been eager to demonstrate their unifying acumen by laying claim to their ability to distribute national resources equitably through the provision of an expanded education delivery system. To achieve this momentous task, strategies have often been arrived at overnight and implemented in a haphazard fashion across the board without clearly defined policies of how the quality of education would be catered to. However, such strategies have always been accompanied by fanfare from various political platforms, all lauding them as the long-awaited solution to the ills besetting the education system inherited from the colonialists.

By the mid-1970s, it had become standard practice for international donors to praise Africa's enormous expansion of the educational system. (Those were the days of contemplating universal primary education for all by the 1990!) Donors had, in fact, much reason to congratulate themselves on Africa's achievements. First, Sub-Saharan Africa had failed to "change" the educational system from its colonial nature despite costly and repeated attempts. The hegemony of Western philosophy and organization, but not its practice, was still strongly rooted.

Second, it was the donors who had contributed many of the resources for the haphazard and unplanned expansion and diversification of the educational systems in the name of access, equity and self-reliance. For example, the following policies were all implemented in various countries with funding by external donors: removing control of primary education from various religious denominations; reintroducing vocational and practical subjects; emphasizing the discovery approach in the teaching of the sciences and the learning of "new" mathematics; developing community self-help schools, particularly at the secondary level, and discouraging the development of private schools; creating boarding schools for girls, nomads and pastoralists; and, increasing the primary school cycle to reach international prescriptions.

A combination of the above-mentioned factors made it virtually impossible to criticize both educational policy and action. Governments and politicians became wary of indigenous research which attempted to inquire into what the educational system was doing to the communities and vice versa. Donors did not assist researchers in bringing controversial results into the public domain; after all, they had, through technical assistance, advised governments on the introduction of the policies in effect. Donors had, regrettably, cajoled African governments into believing that in order to catch up with industrial countries, it was imperative to replicate the instructional models of the latter and had, therefore, enticed governments to borrow heavily in order to finance this so-called reform. Other donors simply wanted to see the socioeconomic transformation of Africa proceed as fast as possible and were prepared to pump funds into whatever "new and relevant" educational project African governments seemed to be besotted with at the time.

Amid a euphoric atmosphere of applause from donors and politicians, educational researchers who were beginning to assemble data which pointed to not only the inadequacies of the new policies but, much more crucially, to the blatant inequalities the new policies had introduced over and above traditional ones could not be tolerated. For instance, researchers who attempted to point out that the wholesale removal of primary education from the control of religious bodies had in fact removed education from the control of men and women with intellectual integrity, courage, independence of thought, and pride in educational excellence were branded as sectarian and parochial. Other researchers who pointed to the unpopularity of technical and vocational education in systems driven by academic performance on theoretical examinations were branded as retrogrades with a colonial mentality.

Under these circumstances, a small, fragile and fragmented indigenous educational research community, without the political clout of governmental support and lacking the resources to publish and disseminate their results widely, became mute observers and simply documented the unfolding events wrought by a ceaselessly changing cast of policies in the educational system.

Despite their insistence that communication among researchers and dissemination of research results are key activities in building a strong and sustained educational research capacity, a number of funding agencies

have not taken the important step of publishing sufficient quantities of the research results they have compiled over the years. Therefore, we arrive at the present situation, which is historically unique. On one hand, the largest proportion of foreign-inspired research results conducted under the auspices of donor agencies remains fugitive as far as African researchers are concerned. On the other hand, the largest proportion of the results of indigenous research which can be painstakingly assembled from country to country, institution by institution, and often times from one individual researcher to the next is also fugitive to *all* researchers, not because it is not available but primarily because it attempts to expose the inequalities in the educational system brought about by post-independence educational policies.

The operation of the ideology of poverty is therefore evident in the conduct of educational research in Sub-Saharan Africa. Because funds are controlled by powerful agencies who also generate policy, provide technical assistance and expertise, and monopolize foreign-inspired research results by preventing their entry into the wider public domain, the contribution of indigenous research can be totally ignored and therefore claimed to be non-existent. In addition, since research conducted outside mainstream agency funding is unlikely to support donor policies, it is also unlikely to support the policies governments adopt as a result of donor advice. Consequently, this literature is regarded by both government and donors as subversive to mainstream thought. African governments prevent the entry of such literature into the public domain by prejudging it as small, unavailable and irrelevant, and by branding its authors, the research community, as radicals. Donors prevent the entry of the same literature into the mainstream by failing to collect it, belittling its quality when available, and by insisting on its rehabilitation through the use of "recognized conceptual frameworks and paradigms".

If I have dwelt on the issue of funding and the conduct of research, it is because it is necessary to understand the important issue of "ownership" which is involved in research and which determines whether or not the results of research will be used in decision-making and policy-making in educational development.

Ownership of educational policy development and research

Hough (1984) has argued that public policies are essentially about transforming group conflicts over public resources and values into authorized courses of action concerning their allocation. The experience of funding education and educational research discussed above, as well as the way in which new policy is made and implemented, suggest that educational policies in much of Sub-Saharan Africa have not yet attained the status of genuine indigenous public policies. This is because the existing policies derive more from powerful external private sources than from groups and communities within African countries.

Consequently, the process of transforming conflicts over allocation of resources and values into authorized action in the educational system as well as in research is not conducted between the African public and their governments but rather between credit and donor agencies and African governments. Whenever African governments want to make changes in an educational system, they set up education review committees which are expected to examine existing practices and recommend new and more relevant ones. Typically, such committees collect a plethora of grievances which people have about the educational system, but invariably make recommendations which are more in tune with international prescriptions than with the grievances the public expresses.

More crucially, the recommendations do not contain suggestions about some of the roles the communities, as the main stakeholders, see themselves playing in order to eliminate the causes of existing grievances in education. Governments and committees relying on foreign-inspired research use the ideology of poverty to prevent the entry into education of "locally" relevant curricula and delivery systems by arguing that the communities have no technical and specialized knowledge, and that the introduction of a variety of delivery systems would result in confusion and inequality in society. Therefore, we arrive at a cycle of conditions and factors which together effectively remove decision-making on educational policy first from governments by donors, and finally from the communities by governments, ultimately leaving the overall processes of educational policy development to the ownership of the major funding agencies. Yet, as long as the ownership of policy is still monopolized by those who provide the resources, it is unlikely that the educational project

as a whole – as well as the prioritized research activity, externally derived – will acquire sufficient legitimacy to elicit the kind of ownership which is needed within the indigenous communities of parents, researchers and practitioners and which is a prerequisite for full participation in educational development.

The quality of research and its relevance for policy

Because much of indigenous educational research is fugitive, few studies of educational research ever obtain a relatively comprehensive picture of the quality of such research. The methodological flaws, according to Northern paradigms, detected in a few studies constrain the building of a realistic picture of indigenous research. Casual observations reveal that research studies conducted using the positivistic paradigms tend to exhibit considerable gaps in methodology and presentation of data. Research based on qualitative and phenomenological perspectives tends to be more realistic and faithful to local concepts and perceptions. However, there are many important and excellent studies on various issues, such as examinations and inequality (Kenya and Malawi), adult education (Ethiopia, Tanzania and Zambia), gender (Botswana, Mozambique, Nigeria, Tanzania and Uganda) classroom discourse (Francophone Africa), to mention a few examples. But until a thorough investigation of the quality of indigenous research can be undertaken, the issue of quality will continue to be a controversial subject prejudiced by subjective and individual judgements.

But the failure of some indigenous educational research to stand up to various methodological criteria of quality should neither be used to dismiss summarily this research nor to undervalue the potency of what it says about the functioning of educational systems. Calls for new research should ensure that we have distilled as much as possible out of what already exists – the useful lessons, both positive and negative, within this literature. It is conceivable, for example, that there are already some useful research results on each of the four main issues of development, identified by Hallak and Fägerlind (1991), namely: alleviating poverty, promoting democratic values, integrating environmental considerations and achieving education for all.

Running through the discussion of Hallak and Fägerlind (1991) is the theme that a vicious cycle of poverty, ill-health, ignorance, and environmental degradation exists. In calling for new research and action on these areas, it must be realized, however, that in much of Africa we no longer have an undifferentiated group of the poor and those in ill-health. Many of those in ill-health may not be ignorant but simply incapable of accumulating the large sums of money demanded before treatment. Many categories of people such as teachers, nurses, secretaries, factory workers and clerks, who in the late 1970s were perceived as constituting the emerging middle class, have through the 1980s been conscripted into the class of the poor due to the collapse of national economic systems. In view of this fact, many of the activities suggested in the *World Declaration on Education for All* (1990) which base much of their enthusiasm on the elimination of ignorance as a fundamental state in development must be carefully examined. The majority have been tried before. Under what circumstances did these activities either succeed or fail? Let me take only one example of policy, namely the equalization of opportunity through the expansion of provisions for primary schools, and examine what indigenous research says about its ability to improve the quality of life for urban and rural communities.

Research on provision of primary education

Under the rubric of education as an opportunity-equalizer, governments have installed policies to cater to various under-served groups. Indigenous research has shown since the early 1960s that efforts accompanying these policies have been characterized by three elements:

1. Their implementation has either increased or deepened the inequalities they were supposed to eliminate, or created a bigger group of the under-served.
2. The marginal improvements brought about by one set of policies and practices have tended to be contradicted by subsequent policies and practice.
3. The questions of the identities of the under-served tied to regions, sex, or climatic conditions have usually been turned into major inequality issues.

Educational inequality has been a recurrent theme in educational reform in Sub-Saharan Africa. Policies to correct such inequalities have been based on the notion that the inequalities result from existing regional economic imbalances. Therefore, "equalization" policies have always attempted, albeit unsuccessfully, to provide more resources to the remote areas by the building of more schools, providing more teachers and more facilities, thus enabling a larger number of rural or marginalized children to enroll in school. This has, on the whole, resulted only in a larger proportion of them enrolling briefly and then dropping out of school, failing to complete the cycle and to pass examinations so as to advance to higher levels of schooling, thus creating more disillusionment about education. This scenario has been repeated throughout Sub-Saharan Africa for many other policies such as: attempting to enroll children from nomadic and pastoral communities in boarding schools; building self-help schools to increase the proportion of students going to secondary schools; and providing free schooling in order to encourage parents to education their daughters.

The fact of the matter is that the inequalities are not the result of existing regional economic imbalances. The regional economic imbalances are themselves symptoms of a much deeper and widespread inequality in educational delivery. The fundamental inequality is that children who enroll do not benefit adequately from their attendance at school. A good educational system is not one where everyone is enrolled. Rather, it is a system in which those who enroll and complete the cycle become valuable social capital for education and development. Because the present educational system is so totally inefficient and ineffective, it perpetually defeats two of the cardinal foundations of education, namely: its effect as a multiplier of intellectual and social capital and its ability to spiral the economies of scale from one school cohort to another and from one generation to the next. In both rural and urban areas only a small proportion of children ever manage to acquire adequate skills and knowledge to enable them to contribute adequately as social and developmental capital.

The universal educational ladder has been mutated from a pyramid to an inverted "*T*". This aberration is not only indicative of the small number of those who progress through the educational system, but it also graphically symbolizes the small size of intellectual capital dragging

behind it an immense load of those who have been inadequately served in the educational system and who are unlikely to possess the capacity for independent development.

The present educational project has two important dimensions which institutionalize educational inequality. First, a child must develop adequate competency in a metropolitan language in order to understand instructional discourse and to be able to decipher learning tasks and meet examination demands appropriately and correctly. Second, the examination which is taken as a measure of learning achievement is not mainly a test of what the child knows, but rather of his mastery of skills in the use of the metropolitan language.

Therefore, children who have adequate exposure to the use and processing of information using a metropolitan language, such as those children in some urban homes and in some high-cost schools, are said to have achieved success in the educational system. As has been pointed out, the curriculum and examinations based on it are founded on a vision of the primary school system that is only realized with any consistency in the high-cost schools, where because of adequate numbers of qualified teachers, availability of instructional resources, and better practice in and mastery of the metropolitan language, children can be exposed to a vast volume of content in anticipation of secondary school requirements.

Evidently, language plays an important role in the failure of the primary school to equalize social and economic opportunity for the largest proportion of those who enroll in school. The marginal improvements brought about by expanding access are severely contradicted by the policy of using a metropolitan language as the medium of instruction, thus severely limiting the access of pupils to knowledge and skills which would lead to improvement in the quality of life. And with a policy of expansion of provision, initial numerical access only deepens the inequalities in provision and creates a bigger group of the under-served. In addition, the confused politics of national unity versus ethnic identity are, in fact, often used to add to the burden of rural children by introducing a third "national" language, instead of using research results to sanction the various mother tongues as proper media of instruction and assessment. The obvious effect of these policies is to reinforce the regional disparities and constrain efforts to raise the standard of living for the majority of children in both urban and rural areas. Until this type of

indigenous research is allowed to influence policy, inequalities in the educational system will continue to be wrongly attributed to economic disparities and more faulty policy will be implemented.

The gaps in educational research in Sub-Saharan Africa

Supposing communities were well aware of the role of language and were also fully active in the decision-making processes, is it conceivable that they would still opt for a metropolitan language or a national language as the medium of instruction for their children? We do not have answers to this and many similar questions. But it is evident that expansion of the provisions for primary education without adequate provisions for the mastery of the medium of instruction lies at the root of the failure of primary schools to teach basic functional and conceptual literacy, which, in turn, plays a role in sustaining the vicious cycle of poverty, ill-health, ignorance and environmental degradation. Yet research on the use of the mother tongue as a medium of instruction and related policies on the provision of books and teachers have largely disappeared from the lists of "new educational developmental initiatives".

The example of language as a basis for gaining access to development illustrates the complex set of factors which only indigenous research can assist in unravelling. A similar example may be provided by the current emphasis on gender research designed to influence policy. There is a sizeable amount of research information of the provision of education to girls and women which leads to the present consensus that: the access of more girls and women to education should be ensured; their participation, retention and survival within the cycle increased; their performance and achievement improved; and, their involvement in technological and scientific development enhanced. There is, however, a major obstacle to the generation of new and useful data which can be fed into appropriate policy interventions – namely, that research on the participation of girls and women in education often treats the constraining factors within the social, cultural and educational milieu as unique to girls and women and, therefore, fails to situate these factors in the broader social assumptions which undergird what should be and what is taught in school and how it is taught. Let me briefly illustrate the nature of this obstacle with reference to school wastage and illiteracy.

It is a fact that many of the girls who enroll in school drop out before they complete the cycle. Unfortunately, there are no serious studies which give an accurate picture of *when* girls drop out of school as compared to boys and *why*. Studies leaning on the "culture of poverty" concept continue to hold sway, and they tell us that poor parents "withdraw" their children from school mainly because they are too poor to afford to keep them at school. When the children drop out, they are put to work. But as Kumar (1989) has noted, no study has yet explained why the child's labor value changes dramatically between grade one and two, where the elimination rate is the highest in India, for example.

Palme (1991:48) argues that even though school is regarded as an educator in the broad moral and technical sense of the word, it is just one of the several educational agencies and, in reality, by no means the most important one. He notes: "When school comes into conflict with . . . more trustworthy and impelling principles for social production such as marriage, or working for the survival of the family, it is abandoned."

As valid as all these explanations of school dropout are, they fail to clearly point out that dropping out of school occurs *after* the family has made the first commitment to send their child to school. It is erroneous to assume that families make private decisions to withdraw their children from school because of backwardness, and at the spur of the moment. Two factors need to be carefully explored by research: (a) the nature of information and skills which the child constantly brings home and which probably increasingly convinces the family that the best course is to withdraw the child from school; and (b) the criteria that families use to monitor and assess the viability of the schooling project for their children. Without concrete data on these two factors, there is the strong possibility that interventions which aim at ameliorating the economic causes of the dropping out of school by girls (and boys) will be found wanting when finally applied.

Similarly, the disparity between performance of girls and boys on achievement tests suggests that poor performance by female primary school pupils, especially in the rural areas, is attributed to a greater demand imposed on female children to assist with household chores (Amuge, 1987; Bali, *et al.*, 1988). But there have been no studies which attempt to assess the different amounts of time rural children spend on various tasks in school and at home.

Preliminary observations by Namuddu (1989) in two rural schools in Uganda suggest a slightly different picture of using time. For example, out of four and six hours a day for lessons in lower and upper primary school respectively, only an average of one and three hours respectively were actually used on school tasks. More than 60 percent of this time on task was taken up by completing exercises copied from either the blackboard or the textbook. In addition, while more than 90 percent of the children lived within a radius of three kilometers of the school, many spent two to three hours daily on the way to and from school, much of this time playing, inspecting merchandise at the local shops and generally taking it easy. Most children had only one hour of daylight in their homes and they used this to fetch water, help with the cooking, and look after younger siblings. Many children were in bed by 9:00 p.m. Cultivation and most major chores and errands were reserved for Saturdays and Sundays when there is no school.

These observations do not negate earlier research, but they show that schools rarely use all the time they have with our children as profitably as is often claimed. They also suggest that much of our estimation of the amount of time which home chores subtract from children's energy to pursue school work may be grossly exaggerated, especially when the age of the children is not taken into account (Namuddu 1991b).

Education has a long history of using non-educational factors to explain away the failure of its clients. Until there is sufficient research on schooling, classroom practices – particularly those concerning the teaching, acquisition, and use of literacy – and their impact on the perceptions and lives of children, it will be difficult to dismiss out of hand the possibility that the nature of the school is the most potent factor contributing to self-elimination and dropping out of school.

Priority areas for educational research

The development of an adequate or appropriate research agenda should ideally depend on the perceptions of the beneficiary. Unfortunately, as pointed out earlier, donor agencies have traditionally taken the upper hand in setting priorities for educational research in relationship to the size, frequency, and coverage of the educational projects they support and fund. Consequently, most countries in Sub-Saharan Africa have no inventories

of priority research projects beyond those identified as part of project identification missions. Previous efforts to set priority research areas have been characterized by two shortcomings.

First, whenever areas are set, there are far too many areas identified within broadly and generally described themes which often lack a time frame and are not necessarily geared to solving the most critical educational problems in the system. A good illustration of this can be gleaned from the following two examples of priorities in educational research.

In Yoloye's study (1990) on African research policies in Africa, which was referred to earlier, only 11 out of the 18 countries which responded to the questionnaire had a list of priorities, which, unfortunately, did not seem to be clearly defined. For example, the areas which were most frequently mentioned included: basic primary education (Burkina Faso, Congo, Kenya, Mali and Nigeria), national languages (Senegal and Seychelles), planning the management of education (Burundi, Kenya and Nigeria), training teacher-trainers (Benin and Congo), the relevant quality of education (Ethiopia, Kenya, Nigeria and Uganda), equity in education (Burundi and Kenya), cooperative education (Burkina Faso), efficiency in education (Burundi, Kenya and Uganda), evaluation of training and education (Burkina Faso) and technical professional education (Congo, Tanzania and Uganda).

Similarly, in a recent survey (Namuddu 1991a) of capacity building in educational research and policy analysis in eight countries (Botswana, Lesotho, Mozambique, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe), researchers and policy makers identified seven basic priorities in research, which they said cut across all levels of all educational systems. These are the need to: (a) increase the effectiveness of human and material resource use in education; (b) improve instructional quality at all levels of the system, including programs for professional training; (c) improve the management of educational institutions and of the educational system as a whole; (d) rationalize the provisions for financing of education at all levels of the system; (e) improve, revolutionize and diversify educational assessment at all levels; (f) improve professional training at all levels, so that emphasis is placed on giving skills for instructional purposes rather than management; and (g) develop systems for maintenance of educational resources and physical facilities.

The *second* shortcoming in the setting of research policies to date is that there has been little commitment to the priority list by either government, research institutions, donors or individual researchers, basically because of the multiplicity of funding agencies, each of which has its own priorities and program of support.

For instance, the Rockefeller Foundation, as the lead agency for coordinating research activity on gender issues, will soon fund – and support for funding – under a new program on the participation of women and girls in education only research which deals with gender. During a recent meeting of African researchers on gender issues (entitled, "Research priorities for the education of girls and women in Africa", and organized by the African Academy of Sciences, 17-18 July 1991, Nairobi, Kenya), the following areas of research were identified as priorities:

1. How have girls and women fought to change the structure of education? How have they grappled with these issues? How do women researchers locate themselves within the context of resources controlled by donors and ministries?
2. What are the issues surrounding the dropping out of school by girls? What is the impact of school fees and other cost-sharing devices? Cultural, religious and family factors? Achievement, performance and pedagogy? Curriculum? Attitudes of teachers?
3. What is the impact on the education and achievement of girls and women of: the curriculum and pedagogy, language of instruction, teachers' expectations and methods, and textbooks and instructional materials?
4. What is the role of societal institutions in informal and formal education in the family, home and community? What are the dimensions of the hidden curriculum of school and home, peer groups, clubs and other organizations, ethnicity, religion, tribe, culture, traditional morality and ethics? And what is the impact of increased access to education by men and women on gender relationships and personal history?
5. How can formal and nonformal education empower women and girls to understand sexuality at home and in school, and to examine traditional values and societal expectations so as to prevent violence in the family and the spread of AIDS?

6. How can action research and research-and-development projects be set up, particularly to develop models of conscientization literature and other forms of media at the primary school, and to develop and test small, self-learning modules on gender issues so as to get the target groups to produce and publish research information on such issues?
7. In what formats and with what resources can existing literature on gender issues and on girls' and women's participation in education be assembled and integrated into a series of simplified resources which can appropriately inform policy-makers, researchers and communities of the main findings of research and how they can be related to policy and action?

Evidently, a number of research policy areas cut across the list of topics in the three examples of priorities mentioned above. These could well form a basis for identifying specific research projects. There is, however, a more fundamental and perhaps urgent need for educational developmental research in Sub-Saharan Africa than is implied in the above listings. This urgent need is underscored in the background paper to this meeting (Hallak and Fägerlind, 1991) in the proposal to set an education research agenda concentrating on alleviating poverty, promoting democratic values, integrating environmental considerations, and achieving education for all.

A similar but broader agenda is defined in a recent policy document by IDRC (1991), consisting of nine substantive areas, namely: (1) environmental change and ecological degradation; (2) human resources development; (3) government policies and programs; (4) economic problems; (5) access to food; (6) public health; (7) population pressures; (8) income generation and employment creation; and (9) political violence and military conflict.

However, what is not emphasized in these two documents is that the priorities in educational research in Sub-Saharan Africa concern not simply the substantive areas, but, perhaps much more importantly, the methodology of research. It is true that, for instance, we need to "assess and then address the educational needs of the poor through innovative schemes such as those to meet the specific demands of education for children at work" and understand how "the structure and functions of institutions are forced to change in periods of profound

reform" (Hallak and Fägerlind, 1991:3). However, in order for the results of educational research to bring about genuine change in education, its dominant methodology must play three fundamental roles:

1. It must win the support and participation of ordinary people, not only through the installation of community-oriented projects and curricula which teach those who work with communities the right approach to education, but also through processes where experts and communities identify the critical educational problems and work out their solutions together.
2. In order to win the support and participation of ordinary people, research methodology must establish itself as the epitome of a clear commitment to democratic consultative procedures and processes, whether in planning, the soliciting of data, or the accounting for funds.
3. Through commitment to democratic consultative procedures and processes, research methodology must evolve as a political tool for the restoration of educational policy to the ownership of the local communities, so that negotiations about educational change and development become the responsibility of the indigenous public and organizations of governance at different levels of government.

These three elements would have to be components in any sort of research falling within the five categories as described by Shaeffer and Nkinyangi (1983), namely: (1) research about research to analyze and assess research orientations; (2) content research to analyze educational systems; (3) research for planning to evaluate, diagnose and make forecasts; (4) evaluative research to introduce and assess change; and (5) action research to introduce modifications directly into practice.

Without combining different types of research with the three components in the methodology of educational research, it is difficult to contemplate enduring changes and reforms in the education system which would be capable of bringing about genuine alleviation of poverty, promotion of democratic values, integration of environmental considerations in education and economic development, and achieving education for all. It is only when the research methodology changes that workable and sustainable alternatives – alternatives which do not create

more and deeper problems than those they were meant to solve – can be devised by governments and communities.

The changes in research methodology will call for equally fundamental changes in donor-recipient relationships. As discussed at the beginning of this paper, not only have donors taken too important a role in policy decisions, but they have also perpetuated a conception of those who receive developmental aid as unequal partners, obstacles to development, and lacking in the kind of skills and knowledge needed to utilize aid appropriately to lead to development. It is rare to come across aid efforts that have appropriately accounted for local knowledge and local agency with regard to community decision-making structures and practices. Stamp (1989) points out that the task of exploring in detail why a particular aid policy failed is not as eccentric as it may seem: the mistakes in development research and aid policy, so often repeated, are destined to further repetition unless a clearer and more systematized understanding of the mistakes is created.

In addition to recasting the donor-recipient relationships and supporting the recovery of local community knowledge in development, donors will have to consider the dominant international information flow, where the immense retrieval problems faced by indigenous researchers are themselves part of the larger problem of a power imbalance between the rich and poor. This will only be possible if, as we are constantly reminded, there is a case for donors to stand back and listen to what the African response to ways of accessing such data is.

Derived research priorities

Undergirding the arguments throughout this paper is my strong belief that, despite the existing level of problems in the educational system in general and in educational research in particular, the crisis mentality which now characterizes all considerations about Sub-Saharan Africa is not warranted. We are not starting from scratch. There is already a strong basis for moving forward. Consequently, my assembling of a list of priorities for educational research is based on the belief that the most crucial need is to compile and use the knowledge which we already have, rather than fumble ceaselessly with so-called "new" initiatives. Therefore, research is needed on the following substantive areas of concern:

1. A great deal is known about the factors which affect the quality of education and student performance and achievement in the present systems and structures. Of paramount importance and interest, then, to communities, who, like governments, look upon education to help improve the quality of life for all, is research information related to and explaining the influence on achievement of factors such as: the mastery of the medium of instruction; the effect of the use of a metropolitan language in instruction and in public examinations; the pedagogy of literacy; the basic content of the core curriculum; and, the effects of management styles on the learning environment. How can the meaning of this information be brought to the local people to assist in the kind of decision-making which will serve the interests of communities and have the potential to stimulate demand for more information? And how can local knowledge and decision-making structures be incorporated into new and innovative strategies designed for educational development?
2. Schools in Sub-Saharan Africa have been left to deteriorate so that many no longer have a clear vision of their mission. The need here, then, is to discern what are the crucial tasks which need to be implemented, by whom and how, in order to: (a) strengthen teachers' and pupils' ability to regain or formulate a relevant vision of their mission; (b) work out strategies for managing grass-roots community schools which will enable them to adequately deal with institutionalized political and bureaucratic control in policy-making, implementation and evaluation; (c) strengthen the community's ability to supplement the capacity of the school to figure out where the opportunities lie in making a breakthrough in the creation and use of locally relevant knowledge; (d) strengthen the capacity of the school as a community institution to utilize all human and material resources as educational and social capital; (e) develop and sustain capacity in the larger environment for converting information into education through learning processes which are meaningful in the lives of children and young adults; and (f) experiment with different combinations of the ingredient

material, political, intellectual and incentive systems which lead to the sustenance of a quality education.

3. In the spirit of Jomtien, the emphasis on basic education for all is on the formation of broad partnerships of supporters and participants – the communities, teachers and learners. Currently three factors keep most African adults out of the social and intellectual debate on education: (a) an inability to read and write; (b) the bureaucratic separation of schools from the community; and (c) the application of the ideology of poverty. Therefore, the fundamental issues in research are not simply ones of selecting topics and methodology, but also those of deciding when an answer has been found or an issue satisfactorily explained, and effectively demanding answers to additional questions. In the absence of sufficient levels of literacy, in view of the all-encompassing grip of the state on educational delivery, and in view of the increasing levels of poverty, what, then, are the prerequisite knowledge and skill areas, and how can they be acquired and used to enable the majority of adults to judge satisfactorily the viability of the education project? How can communities recover their capacity for decision-making so as to control the questions on education? What are the locally-derived and supported strategies for improving education within the various local perceptions of the purpose of education *vis-à-vis* the individual, the community, and society?
4. The quality of education in many schools today is poor when, in fact, it could be so easily and quickly improved were schools to have the basic information and instructions on: (a) what teachers are expected to achieve with their pupils; (b) how much time there is every week for the different subjects; (c) what teachers are supposed to teach in the different grades; and (d) what some of the best ways of providing pupils with the different skills, knowledge and attitudes in the different subjects are. What are the most strategic and cost-effective methods of getting this information to schools and communities?
5. Much of the systematic planning in education in African countries is frequently overtaken by political expediency. What

kind of educational planning at the local level can remove the apparent omnipotence of central governments, the conceit of elite professionals, and the egotism of individualistic and feudalistic approaches to resource allocation and use so as to bring about the kind of collaboration needed in order to cope with the many educational problems? What kind of educational planning at the national level can anticipate major trends in the functioning of the educational system within an environment of severe economic and uncertain political conditions?

6. There are now enormous disruptions to the educational system in the form of strikes, abrupt closures of educational institutions, mass examination failures, dropping out of school, destruction of school property, refusal to attend classes, rape and harassment of students by other students, teacher immorality, etc. Are these disruptions simply reactions to archaic management styles and to unfair assessment systems as practiced in individual schools? Or are these activities symptoms of a deeper, fundamental and more widespread form of resistance by students, first as consumers who are dissatisfied with the educational project, and second, as unwilling participants, trapped in an institution representative of wider oppressive structures and practices in society?
7. What are the effects and implications of differing age structures on the acquisition, retention and use of knowledge and skills in and out of school? Most primary school teachers enter teaching between 18 and 25 years of age. With retirement for most teachers at 55, they will have worked between 30 to 37 years. How will teachers working in educational systems lacking provisions for skill-upgrading curtail gross inadequacy and incompetency? How can the "skills" of the under-educated teachers and those who do not get professional training be kept up-to-date when they cannot afford to be trained in the first place? What are the implications for the curriculum and education at the primary school level, where half the student population may be as old as the teachers?
8. Tertiary education is a very expensive undertaking on an individual student basis, even though it covers a small

population. Some research in Sub-Saharan Africa tells us that only children of the rich and privileged elite manage to reach university. Other research seems to suggest that poverty is an incentive for children to raise themselves through education. Indeed, there was a time when it was claimed that children from poverty-stricken homes did better at school than those from privileged backgrounds. The students tell us that they are all too poor to support their tertiary education. What is the reality and how has it evolved? How can the university balance the quality of education against the right to education? How can tertiary education protect its academic autonomy and freedom against political manipulation and attack?

9. How should national resources be allocated to ensure the maximum benefit to the various aspects of education, including educational research? Who should do the allocating, how can this process be improved, and who can continuously influence the allocation process? How can local resources be mobilized to halt the creeping retreat from intellectual frontiers in Africa through intellectual hemorrhage, environmental degradation, wars, economic crises, and the collapse of fragile social institutions? If it is believed that networks are some of the most important ways to enhance communication, why do the existing ones have a very difficult time functioning and evolving?
10. The philosophy upon which much of educational reform in Africa is based seems to be undergirded by the notion that it is better to do many things badly than to do a few things well. How can the experiences of existing models of excellent programs and innovative ways of structuring and delivering education be used to put together alternative models which allow expansion with quality and reduce quantity through provision of quality? How can the seemingly endless patience of the poor and the constant threat of nature to their existence be converted into an obsession for survival which will provide the resolve and impetus for implementing the educational systems that will propel Africa into a modern, literate and science-oriented domain relevant to social, economic and cultural developments?

Summary

I have, in the preceding discussion, attempted to isolate the priorities of educational research in Sub-Saharan Africa. I have belabored the point that positive reform in African education is unlikely to come about as long as the current concepts, practices and mechanisms for funding both research and educational development remain unchanged. I have emphasized that there are already sufficient research results which could, if interpreted and used properly, form a strong basis for change in educational delivery. Consequently, in setting up a list of priority areas of research, I have sought to identify activities which would use the existing research information to attempt to return the ownership of educational policy-making to the communities and local educators.

It would be erroneous, however, to assume that a more concerted and coordinated effort on the part of donors to allocate slightly more funds for research on a few priority areas all over the continent would bring about dramatic changes in education. First, research alone cannot bring about change. Change is a social process undergirded by a whole range of local assumptions with regard to how the existing social relations between people and resources should or should not be rearranged. Africa has had a long experience of "outsiders" trying to impose their conceptions of how these relationships should be arranged, and the record of success is dismal. To bring about change resources are needed, but there has to be also an elusive social-intellectual ingredient leading to the reconceptualization and rearrangement of social relationships within the family, among the sexes, and across different ethnic, cultural and socioeconomic groups, in forms and structures well beyond ordinary research. The kind of research which can augment such reconceptualization is labor-intensive, long-term and, therefore, expensive.

Second, the amounts of funds allocated to educational research in Africa have traditionally been small compared to research in other sectors. Donors need to ask themselves whether or not they seriously believe that a product of enduring quality – be it research, reform, innovation, or the development of technology – can actually be derived out of the work pursuant to the allocation of a certain amount of funds. It has been my experience that a great deal of the misuse and misapplication of funds so rampant in "small" development aid projects stems from the realization by those who have access to such funds that actually neither donor nor

recipient believes that something useful can be "purchased" out of such meager funds.

I have enumerated the international and national constraints which now keep much of the available research information out of the public domain and debate, and, therefore, substantially reduce its contribution to policy development and implementation. I hope that this meeting, which has set itself the task of not simply identifying priorities of research, but also of forming a broader coalition and consensus on what needs to be done, will find some of these ideas useful.

References

Amuge, I.M. 1987. *Gender Differences in Academic and Post-School Experience among Tanzanian Secondary School Students.* Unpublished Ed.D. dissertation. Albany: State University of New York.

Bali, S.K. *et al.* 1988. *Contribution of Aptitude Tests to the Prediction of School Performance in Kenya: A Longitudinal Study.* Lisse: Swets and Zeitlinger.

Coombe, T. 1991. *A Consultation on Higher Education in Africa: A Report to The Ford Foundation and The Rockefeller Foundation.* Department of International and Comparative Education, University of London.

Hallak, J. and Fägerlind, I. 1991. "Educational research in developing countries: A background paper". Paper prepared for the "Seminar on Educational Research Priorities in Developing Countries", Stockholm, September 12-14, 1991.

Hough, J.R. (ed.) 1984. *Educational Policy: An International Survey.* London and Sydney: Croom Helm.

IDRC. 1991. "Strategic Choices for Sub-Saharan Africa". IDRC-MR289e. Ottawa: International Development Research Centre (IDRC).

King, K. 1988. "Aid and educational research in developing countries: The role of the donor agencies in the analysis of education". Centre for African Studies. Edinburgh University.

Kumar, K. 1989. "Primary education and development of norms". A paper presented at the Sixth World Congress of Comparative Education, Montreal June 26-30, 1989.

Namuddu, K. 1989. "Pupils and their community". Report of the MINDSACROSS Project. Kampala.

_____. 1991a. "Capacity building in educational research and policy analysis: Case study of Eastern, Central and Southern Africa". A consultative report for IDRC. Nairobi.

_____. 1991b. "Education research priorities for girls and women in Africa: A review of a research proposal by the same title, submitted to the Rockefeller Foundation by the African Academy of Science. Nairobi.

_____. 1991c. "Strengthening analytical and research capacity in education: Lessons from national experiences". Paper written the seminar on "Strengthening Analytical and Research Capacities in Education-Lessons from National and Donor Experience", July 1-5, 1991. Bonn.

Odhiambo, T.R. 1988. "Continental networking in science and technology in mobilization of African scientific talents for development". In: T.T. Isoun (ed.) 1988. Proceedings of the international conference on networking of African scientific organizations. Nairobi: Academy of Science.

Palme, M. 1991. "Repetition and dropout in Mozambique's primary schools: Report from a research study conducted in November 1989 and August 1990". Planning and External Relations Department, Ministry of Education. Mozambique.

Shaeffer, S. and Nkinyangi, J. (eds.) 1983. "Educational Research Environments in the Developing World". Ottawa: International Development Research Centre (IDRC).

Senteza-Kajubi, W. 1990. "The challenges and opportunities of secondary education in Africa by the year 2000: Objectives, content, strategies, methods and evaluation". Keynote address to the "Seminar on Improving Education in Africa". The Social and Environmental Program for Africa. Nairobi.

Stamp, P. 1989. "Technology, gender and power in Africa". *Technical Study 63e*. Ottawa: International Development Research Centre (IDRC).

Yoloye, E.A. (1990) "Educational research priorities in Africa". In: *National Educational Research Policies: A World Survey*. Unesco, Paris.

World Bank. 1988. *Education in Sub-Saharan Africa: Adjustment, Revitalisation and Expansion*. Washington, D.C.: World Bank.

World Bank. 1989 *Sub-Saharan Africa: From Crisis to Sustainable Growth*. Washington, D.C: World Bank.

World Declaration on Education for All. 1990. Report from the "World Conference on Basic Education for All", held in Jomtien, Thailand in March 1990. Published by the Inter-Agency Commission (UNDP, Unesco, Unicef and World Bank). New York: Unicef House.

Educational Research Networking: The ERNESA Experience

Changu Mannathoko [1]

Educational research in Eastern and Southern Africa is operating and developing against a background of economic decline, political instability and deteriorating standards of health and social welfare. In this environment, educational research has an important responsibility because it nurtures development in the region by providing baseline data on the trends, failures, and successes in the educational sector. The educational research community in the region is now better able to meet this responsibility, for it is confronting issues and problems in the region through a collaborative approach.

The decade of the 1980s represented a landmark in the evolution of educational research in Eastern and Southern Africa because it was during this period that educational researchers in the region began collaborating in the long and arduous task of forming educational research networks. The decade saw research networks at national, sub-regional and regional levels take up the challenge to develop more relevant, critical and self-reliant educational research. This paper focuses on the role of one such regional educational network, the Educational Research Network in Eastern and Southern Africa (ERNESA), in the educational development process.

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Historical background

ERNESA was established in 1985 at a meeting of senior educational researchers from nine countries in the region. The meeting was jointly sponsored by the International Development Research Centre (IDRC), the Rockefeller Foundation and the German Agency for Technical Cooperation (GTZ), and was hosted by the IDRC. The rationale behind the formation of ERNESA was to establish nationally-recognized structures for networking in educational research and at the same time to establish a research training program in order to develop research capacity at both national and regional levels.

From the onset, ERNESA has insisted that its foundation be at the national level through the creation and strengthening of national research networks for information-sharing. This requirement arose out of the conviction that national educational research networks form the best structure for collaboration and information exchange across countries and, ultimately, form the most solid basis for building educational research capacity. ERNESA committed itself to the challenge of facilitating the cross-fertilization of ideas among the local research community, national policy-makers, practitioners and the donor community.

ERNESA formulated a constitution to enable it to acquire the status of a legally-constituted regional research network in May 1991 in Malindi, Kenya. At the meeting, ERNESA decided to locate its secretariat in Gaborone, Botswana and commenced the process of registering it there. Presently, ERNESA is processing its registration as a non-governmental organization (NGO). It is hoped that it will be registered as such before the end of 1991.

Program of activities

Research capacity building at the national level

Educational research capacity building at the regional level is dependent on the capacity and capabilities of the national research networks in the

twelve ERNESA member nations (Botswana, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe).

The national research networks have established an essential foundation for the development of ERNESA as a sound regional educational research network. However, the activities of national educational research networks are restricted by complex and difficult financial regulations and procedures. These regulations and procedures make it difficult for national networks to quickly receive and make use of the funds needed to cover their commitments. These networks are engaged in a wide variety of activities which focus on national research capacity building.

The priority activities of ERNESA are:

1. Establishing legal national research networks where none exist.
2. Increasing national research capacity by broadening and accelerating the membership drive. Members are recruited from schools, colleges, universities, government departments, and NGOs as well as from other institutions and individuals who are not directly involved in the educational field.
3. Conducting seminars, workshops and conferences to disseminate and discuss important research issues in, for example, basic education and national research priorities, to brief and up-date members on network research activities, and to offer instruction on the writing up of proposals and research findings.
4. Publishing bulletins and newsletters regularly for the purpose of disseminating information to members and policy-makers.

The success of the above activities varies from country to country, depending on the financial organization of the country, the strength of its national executive, the support of the government and the degree of political stability. All these national activities are sponsored by IDRC, which has been sponsoring the establishment of national educational research networks in the region since 1982.

ERNESA training schemes

There are two sub-regional research training schemes within ERNESA, namely the Botswana, Lesotho, and Swaziland Small Educational Research Award Scheme (BOLESWA Award Scheme) in South Africa, and the Kenya, Uganda, Tanzania Educational Research Small Award Scheme (KUTERA) in East Africa. These two IDRC-sponsored small research grant schemes are vital for the survival of the young research network. Without these schemes it would be difficult for ERNESA to go beyond the mere creation of national research structures to the activities of practical networking. These small award schemes are gradually developing a critical mass of trained local research expertise and infrastructure.

The BOLESWA Educational Research Awards Schemes were linked with the launching of the joint publication of the BOLESWA *Educational Research Journal* in 1981. This journal is produced regularly by the joint editorial board of the Botswana Educational Research Association (BERA), the Swaziland Educational Research Association (SERA) and the Lesotho Educational Research Association (LERA).

A major activity of these three associations is the organization of a bi-annual symposium. The regional symposium idea stemmed from a 1986 symposium on "North-South Collaboration in African Educational Research Development" held in the U.S.A. At that symposium, participants decided that Southern Africa should host the next symposium. Therefore, in 1987 the first symposium was held in Maseru on "The Planning and Coordination of Educational Research". The second symposium was held in 1989 in Gaborone, Botswana. The theme selected for that symposium was "Educational Research in the SADCC Region: Present and Future". The proceedings are presented in a book that is available for purchase.

In July the third BOLESWA symposium was held in Mbabane, Swaziland and its theme was "Educational Research Networking in the Region". ERNESA members from East Africa and other Southern African countries (Kenya, Malawi, Tanzania, Uganda, Zambia, and Zimbabwe) participated in both the 1989 and 1991 symposia. The collaborative activities of the BOLESWA research associations provide evidence of the concrete output that can come out of a regional network.

Since 1981, IDRC has been providing immeasurable stimulus to both KUTERA and BOLESWA training schemes through its generous funding. The benefits of IDRC investment in the training projects were not evident at first. However, currently the output from the sub-regional bodies demonstrates that the IDRC financial investment was worthwhile. A basic research structure has been built in the region and awaits further development.

Regional research projects

The ERNESA-Harvard project. ERNESA subscribes to research capacity-building through the development of training programs and involvement in regional research activities. Hence, the ERNESA-Harvard project is aimed specifically at improving the quality of policy research and dialogue in the region by providing ERNESA researchers with a heavy dose of methods training. The project is aimed at following the in-country dialogue process between researchers and educational policy-makers. While only seven of the twelve member countries of ERNESA will be participating during the first two years of the Harvard project, more countries will be involved in the years following.

The project is dependent on obtaining funding from various donor agencies who are involved in educational policy research. Funding is required for the development of a database that will provide information about in-country policy programs, and the collaborative process itself, as well as for materials and support for participants who cannot find funding. ERNESA is currently busy discussing this project with various donor agencies such as the Rockefeller Foundation, IDRC, and the United States Agency for International Development (USAID). It is only through the formation of a consortium of donor agencies that adequate financing for this project will be obtained.

Basic Education for All. In August 1989 ERNESA members committed themselves to giving priority to research on Basic Education for All. Prior to the Jomtien World Conference, ERNESA decided to prepare a position paper entitled "Equity and Quality Concerns in Basic Education: Emerging Issues in Research and Policy in the Eastern and Southern Africa Region". The position paper was a contribution to the new and

expanded vision of Education for All. The paper focused on two important issues, namely:

- the new challenge of focusing simultaneously on both quantitative and qualitative development in the pursuit of Education for All, as opposed to the past trend where emphasis was more on quantitative expansion; and
- the fact that a review of a sample of experiments which were aimed at promoting basic education in the region established that few of these experiments focused on the promotion of both quantity and quality issues.

It was in January 1990 that ERNESA resolved to make Education for All its number one priority during the decade of the 1990s. To make this resolution a reality, ERNESA held a regional meeting at Malindi (May 6-8, 1991), where the main item on the agenda was a follow-up and research-and-policy analysis on Education for All. Three themes for this process were identified, namely:

1. Equity and quality in Education for All.
2. The impact of conflicts and wars on Education-for-All initiatives in the region.
3. Community-based Education-for-All initiatives in the region.

Under the broad theme of "equity and quality" various sub-themes have been identified: achievement; gender; minority and disadvantaged groups; language policy and the medium of instruction; and learning materials. In this area, Unesco, FEMNET and ERNESA are collaborating in a regional study of "The Girl Child and Educational Disparities". Unicef is sponsoring the project and ERNESA has a coordinating function in the project, together with FEMNET and Unicef. Furthermore, Unicef and ERNESA are about to embark on a study of nomadic groups and educational disparities in the region. ERNESA and NORRAG (North American and European Research Review and Advisory Group) also have a collaborative research project entitled "Education for All: New Interactions Between National and External Agencies". The coordinating network on behalf of ERNESA is the Educational Research Network in Tanzania (ERNETA). Tanzania is the only country involved in the pilot study.

Under the theme of "the impact of conflicts and wars on education-for-all initiatives", the sub-themes identified are: insecurity and loss of life; refugee problems outside the war zone; and resource diversion from social development to defense. With regard to the third theme, "community-based education-for-all initiatives", the sub-themes identified are: popular education; community and individual self-reliance; skill training; the use of the third channel in educational delivery; and partnership for education and development.

The three themes are broad in scope, which is one reason why it has not been possible to spell out all the important sub-themes. The few sub-themes that have been listed are a significant illustration of the issues that ERNESA members might wish to focus on as the basis of a state-of-the-art review they are invited to do on each theme. The expectation is that the sub-themes will provide a focus for case studies highlighting the experiences in specific countries that are worth being shared region-wide. ERNESA has provided a wide framework for its members to work out relevant areas for research and policy analysis with a view towards promoting Education for All in the region.

ERNESA research profile. ERNESA is in the process of producing a profile of educational researchers in the region. The booklet entitled *ERNESA Research Profile* will provide policy-makers, research networks and donor agencies with a catalog of researchers in the region and the areas the researchers specialize in. This will prove useful when consultants and researchers are required. The German Foundation for International Development (DSE) is sponsoring this project.

Regional research abstracting project. DSE is also funding the ERNESA research abstracting project. This will involve the setting up of regional documentation centers. ERNESA representatives will also be visiting the Latin American Network of Documentation and Information (REDUC) centers in Latin America in order to learn how to set up, manage and evaluate our own centers.

Building a regional basic education database. As a follow-up of the ERNESA position paper on Education for All, the network is in the process of compiling an educational research inventory. This is being done with a view to doing regional state-of-the-art reviews on areas of importance to policy-makers and/or practitioners.

Challenges and prospects

As with most worthwhile enterprises, progress has not been entirely trouble-free. A network cannot take off and bloom without a communications infrastructure, and ERNESA lacks a developed communications infrastructure. This severely hampers information-sharing. Moreover, in developing its communications capability, ERNESA needs to carefully select media that are affordable and practical in order to cope with soaring costs.

National research networks and ERNESA itself are plagued with the perennial problem of inadequate financing. In most countries in the region the economic crisis and restrictive banking policies contribute to the deterioration of the quality of social services offered, including educational research.

Another difficulty is that the national research networks which ERNESA draws upon have inadequate expertise. There is an insufficient pool of qualified researchers in each country to provide sufficient attention to national research capacity-building. The few experienced researchers are overworked in the universities or public services; indeed, they are suffering from burnout. There are, furthermore, occasions when tension prevails between the demands of the national research networks *vis-à-vis* those of the more loosely-knit sub-regional and regional research networks. More dialogue is required to monitor this problem continually.

ERNESA is negotiating its rapid registration in Gaborone, Botswana, where its headquarters are expected to be located. The registration of ERNESA will go a long way in helping to ease and resolve some of the problems mentioned above. ERNESA will then be legally empowered to raise funds for both its regional-level and national-level activities.

For the time being, however, ERNESA is dependent on donor funding. This can present a problem, since donors sometimes give funds for research in those areas in which they are interested, even if those issues are not a priority locally. IDRC is very active in mobilizing other donor agencies to support both ERNESA and its sub-regional research training schemes of BOLESWA and KUTERA. Already the Swedish

Agency for Research Cooperation with Developing Countries (SAREC), the Swedish International Development Authority (SIDA), DSE, the United Nations Development Programme (UNDP), and USAID sponsor ERNESA projects. The Rockefeller Foundation and GTZ have also expressed a genuine interest in supporting the development of a workable educational research capacity in the region.

ERNESA, then, is confronted with numerous issues and is aware of the fact that it requires self-analysis, greater self-reliance and increased cooperation. In this regard, ERNESA subscribes to the process of monitoring both its shortcomings and successes.

Below I will list and briefly discuss some of the essential activities already under way and incorporated in ERNESA programs of action for the next three years.

1. The strengthening of the administrative structure of ERNESA by establishing a solid secretariat will be undertaken to ensure that ERNESA delivers what it commits itself to. The secretariat requires an office with relevant equipment such as a desktop computer, a telefax machine and telephone.
2. The publishing of a regular newsletter will be continued and expanded. The *ERNESA Newsletter* was launched in 1989 and so far two issues have been produced. We are committed to increasing production so that from 1992 two newsletters will be produced annually. A commitment to a regular newsletter will contribute immensely to strengthening the regional network.
3. Efforts will be made to increase funding of educational research by governments, private sectors, institutions and individuals. ERNESA can only achieve autonomy, development and status by paving the road towards financial self-reliance. The route will be long and difficult, but it has to be taken if ERNESA is committed to serving the interests of the region.
4. ERNESA researchers will become more involved in participatory and action methods of research, without neglecting knowledge-oriented research, which is in short supply. The abundance of policy-oriented research will be augmented.

In the Eastern and Southern African region as a whole, there is a growing appreciation of educational research. This is a result of the international cooperation of governments and research networks obtained in recent years. Governments are becoming aware of the importance of having a pool of indigenous researchers who are likely to be more sensitive to the sociocultural, political and ideological milieu of the country. Through ERNESA, the foundation has been laid for stronger regional cooperation in educational research in Eastern and Southern Africa, and the prospects for such research to make a contribution to national development have increased accordingly.

Educational Research in Southeast Asia

Arfah Aziz [1]

Educational research has been conducted in many developing countries for many reasons – to search for knowledge, to provide data for policy decisions, to utilize funding from donor agencies, as a prestigious project to fulfill international demands, or (mainly) as a requirement for higher education. There has been dubious utilization of research findings, so much so that there have been degrees of disillusionment as to the need to spend time, money and effort to complete research projects when in many cases, policy-makers would neither give time to read the reports nor utilize the findings in any of their decision-making processes.

While this bleak situation may still exist to some extent in many developing countries, the situation tends to be quite different in Southeast Asian countries. Increasingly, findings from educational research projects are being considered in the decision-making process. Research findings are being utilized to support, or rationalize, educational decisions.

This paper will describe the educational research environment of the Southeast Asian region, the various issues common to the countries there, and how these issues influence and affect educational research. The paper will also consider the educational research priorities of the region. While the six countries considered in the region have some similarities, each is very different from the others. Thus, this paper may tend to over-generalize the problems and may not then do justice to the situation in each country. Nevertheless, it is hoped that the reader will be able to get a brief overview of the situation in the region in order to better understand

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the potential contribution from this part of the world to the field of education.

Background

Southeast Asia is the area on the Asian mainland, south of China, east of India, and lying north of Australia. Of the countries in the region, six (Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand) have formed themselves into a regional association called the Association of Southeast Asian Nations (ASEAN). This association promotes a variety of regional exchanges and cooperative efforts mostly in the economic, social and cultural spheres.

All six countries have been relatively stable economically and politically. Five of these countries have experienced a long period of colonial rule: Brunei Darussalam, Malaysia and Singapore by the British; Indonesia by the Dutch; and the Philippines by the Spanish and the Americans. The colonial legacy of Western-style administration and social organization is found in the modern areas and modern sectors in all six of these countries, including Thailand.

The six countries all have strong cultural and religious traditions. Brunei Darussalam and Malaysia are essentially Islamic countries, with Islam as the state religion. Although Indonesia is not an Islamic state, it has the biggest percentage of Muslims in the region. The population of Thailand is mainly Buddhist, that of the Phillipines is mainly Roman Catholic, and Singapore has a combination of Christians, Muslims and Buddhists. The family is still a very important social unit in the countries of the region. Respect for elders and filial loyalty are the norms at all levels of society.

In all countries, there is a relatively high national commitment to education. Education is viewed as a valuable investment in ensuring a child's future. The participation rate for primary education is at 94 percent, while the average illiteracy rate for those over 15 years old is 31 percent, which is low for the developing world. The participation rates in secondary and tertiary education are also high in Brunei Darussalam, the Philippines, Singapore and Malaysia.

All the educational systems in the six countries can be described as centralized, with most policies being determined at the central level; however, there are increasing efforts to decentralize. In Malaysia this is being done through the establishment of district education offices, and in Thailand, the cluster school concept is being institutionalized.

With the value being placed on education as a means of social mobility, much emphasis is placed on the attainment of good "paper" qualifications, and much time and effort is given to examinations. Teachers instruct towards examinations, and parents tend to give more emphasis to private tuition to supplement formal schooling and to ensure that their children would do better in examinations.

Efforts to improve the quality of education are given emphasis in all six countries. In the last twenty years, all six countries have implemented nationwide efforts to improve and renew the curriculum, both at the primary and secondary level. These include projects on the integrated primary school curriculum, non-traditional roles of teachers, and general education at the secondary level. Attention has been given to making learning more meaningful and relevant to the child. Manpower planning underlies many of the changes, with technical/vocational education given greater emphasis and attention.

In the past two decades higher education has been expanding at a dramatic rate in Southeast Asia, with an increase in the number of conventional academic institutions. Two countries, Indonesia and Thailand, have each established an open university which has pushed up enrollment at the tertiary level. The demand for higher education has remained great in all the countries. As the number of places in local universities has not been adequate to accommodate all students, the enrollment of ASEAN students in foreign universities is increasingly high, with the greatest number being in institutions of higher learning in U.S.A., U.K. and Australia.

There are three common features in the region which should be given attention; these are: (1) the pluralistic characteristics of the countries, (2) general internationalizing of the region, and (3) the increasing importance of educational research. These three items will be considered in greater detail below.

The pluralistic characteristics of the countries

The economic and social development of each country in the region has brought together different groups of people with different cultural and social habits. In all the countries, there are multiracial populations existing together and participating in economic, political and social activities. Due to some historical developments under the various colonial rules, these groups have had different levels of participation in economic and educational activities. The first few tasks confronting these newly independent countries were to ensure that the economic and educational disparities would be decreased.

The early days of developing the national educational systems brought some problems on how to equalize educational opportunities without causing extensive conflicts among the groups. Some of the issues which had to be resolved included the medium of instruction, the system and regulation of examinations, the number and allocation of places for higher education, and the content of the curriculum.

Several decisions were made based on political considerations, and needed to be made behind closed doors, by a small group of individuals. These decisions remained sensitive areas even after implementation, and public discussions on these topics were often restricted. In such situations, decisions would be made based on considerations other than educational ones; thus, findings from research would be utilized only if these findings supported decisions already made. This pattern of decision-making characterized the early stages of development of the national educational systems. During that time, large amounts of material remained classified and were not available for public consumption.

The situation has changed in many countries. In Singapore, more and more decisions on education are confirmed and revised on the basis of research findings. Also, in Thailand almost all research done by policy and planning bodies is aimed at eliciting relevant data as well as recommendations for short and long-term policies and planning.

General internationalizing of education in the region

Possibly because of the colonial heritage and strong economic relations with countries in the West, internationalization is an important characteristic of all the educational systems in the region. In many

institutions of higher learning, notably in Brunei Darussalam and Singapore, a large number of members of the faculties are recruited from other countries. The staff development programs of these institutions, as well as various divisions in the ministries of education, work very closely with universities in the U.S.A., U.K. or Australia. This situation is emphasized by policies of donor agencies which require that students go to certain universities in certain countries.

An interesting observation was made by Gopinathan and Nielsen (1988) regarding the skills and competencies of researchers in the region. Taking the "Pool of Experts" directory prepared by INNOTECH (the Centre for Educational Technology and Innovations) with the assistance of SEARRAG (The Southeast Asian Research Review and Advisory Group), and a 10 percent random sample (27 individuals), it was found that all have at least a Master's degree (M.A.), and 60 percent have a doctorate (Ph.D or Ed.D.). As for location of training, 77 percent of the M.A. degrees in the sample were from North America (70 percent from the U.S.A. and 7 percent from Canada) and 22 percent from the person's own country. At the doctoral level, 56 percent were from North America (44 percent from the U.S.A., 12 percent from Canada) and 38 percent were taken in national universities. There was only one M.A. from the United Kingdom and none from other European countries or Australia. Overall, of the advanced degrees, 58 percent were from the U.S.A., 8 percent from Canada and 27 percent from local universities.

There are several regional bodies in the region, notably ASEAN and the Southeast Asian Ministers of Education Organization (SEAMEO). Although ASEAN gives focus to economic and cultural activities, there have been some projects on teacher education and evaluation under its umbrella.

All six countries are members of SEAMEO, and participate actively in training and project activities of regional centers in such areas as science and mathematics (SEAMEO Centre for Science and Mathematics/RECSAM, Penang, Malaysia), languages (SEAMEO Regional Language Centre/RELC, Singapore), educational technology and innovations (SEAMEO Centre for Educational Technology and Innovations/INNOTECH, Manila, the Philippines). There is also active participation in other organizations in the region such as the Association of ASEAN Institutions of Higher Learning (ASAIHL) and Unesco.

Unesco, through its regional office based in Bangkok, has conducted several regional projects on curriculum, among these are the "Joint Innovative Project on Achievement at the Primary Level", "Integrated Primary School Curriculum", and recently there has been a meeting to discuss and identify research and development projects in the area of "Education for All".

In the last ten years, all six member countries of ASEAN accepted and gave support to a new regional network, SEARRAG. This network was established in 1982, as one of the early efforts to regionalize the Research Review and Advisory Group (RRAG), with funding from the International Development Research Centre (IDRC). The group promotes cooperation among educational researchers, policy-makers and practitioners in the Southeast Asian nations through its networking activities and through the sharing of experiences and knowledge in the field of educational research, to ensure the increased contribution of research results to educational policy and practice, and thereby to national and regional development.

SEARRAG has produced state-of-the-art and state-of-the-practice reviews on values education, efforts to raise achievement levels in primary education, teacher education, school management, mathematics education, science education, and learning outcomes. Its information system, Southeast Asian Bibliographic and Abstracting Service (SEABAS), was launched in July 1989. This service attempts to collect all information on educational research in the region for easy access and retrieval for all interested educators in the region. All members are encouraged to promote a SEARRAG-like network at the national level.

Increasing role of educational research

Educational research has had a place within the establishment of each Ministry of Education since the 1960s. In Indonesia, the Office of Education Development, which later became the Office of Research and Development (BALITBANG DIKBUD), was established in 1969. The Educational Planning and Research Division (EPRD) in Malaysia was established in 1963. Singapore established its Research and Statistical Unit in 1965 (and renamed it the Research and Testing Unit in 1981). In

Thailand, a National Education Commission was established in 1959, and it began to produce important, policy-oriented research in the late 1960s. The Philippines has had no national-level research unit until recently when the National Testing Centre was restructured to be the National Testing and Research Centre (NTRC).

Although the institutional structures for educational research are only a few decades old, surprisingly, a great deal of research has already been produced and documented. For example, for the period 1973 to 1983, there were over 6,000 reports and theses produced in the Philippines; in Thailand for the period 1971 to 1979 there were 1,500 university theses and more than 100 reports from the Ministry of Education, and in Malaysia, there were 800. Most of these reports were graduate theses.

There have also been a few landmark studies in the region whose quality and impact have affected the educational system. Among these are the *Murad Report on Dropouts* (1973) in Malaysia, which led to very important policies on textbooks, preschool programs, and residential schools; the *Survey of Outcomes of Elementary Education* (SOUTELE, 1976) in the Philippines, which studied the outcomes of primary education and later which led to profound changes in the educational system; the *National Assessment* (1969-1972) in Indonesia which provided invaluable baseline information for policy-making; and the *Study of Primary Schooling* (1974) in Thailand which was an influential nationwide report, widely disseminated and highly regarded in government circles. By the end of the 1970s, Singapore also produced an important report (1979) which set out the educational policies for the 1980s.

The impact of research projects conducted has yet to be measured. There have been informal statements on the impact of research findings on policy-decisions, but more in terms of projects which have been developed based on these projects. In Indonesia, studies on the concept of mastery learning and the introduction of a modular instructional system at the Development School Pilot Project brought out some good ideas on the use of modules in small-schools with multi-grade teaching, in rural and remote schools and in open lower secondary school and the Open University (Moegiadi, 1991).

In Malaysia, the Status Report of Preschool Education as formulated by EPRD and Unicef has been the basis for policy decisions on preschool

in the country. Preschool has now been brought under the Ministry of Education, and a comprehensive program of curriculum development and teacher training is being carried out. It is also now envisioned that preschool will be an annex of primary schools in the rural areas. Nonetheless, it should be noted that the reports were produced in 1984 and 1986, and the implementation of the policies will take place starting in 1992, a gap of almost eight years.

Although research is conducted mainly by persons in ministries of education and universities, there are efforts to encourage classroom teachers to conduct research. Singapore began as early as 1985 to encourage classroom teachers to conduct research in the classroom as an effort to get them more involved in improving the quality of education in the school system. Malaysia also encourages teachers to conduct classroom research, especially in order to support the implementation of the new primary school curriculum introduced in 1983. Initially, teachers were reluctant to participate in this project, especially due to the mention of the term "research". However, with some amount of training in the collection and analysis of data, many teachers have been encouraged to conduct "projects" in the classrooms. The implementation of the "school cluster" system in countries like Thailand is also encouraging teachers to be more involved with efforts to improve the quality of education offered in the school system.

As was described earlier, the culture of decision-making in the region formerly did not seem to place a lot of importance on research findings, except when these findings supported decisions already made at the political level. However, in the last few years or so, research findings seem to be given a more important role in many Southeast Asian countries. In Singapore, the period 1981 to 1990 was described as the phase of an intensive agenda during which a large number of research and testing reports were produced. These studies covered a very broad field, dealing with various aspects of education, including child studies, teacher education, and test development. The Research and Testing Division, which was established in 1981, was entrusted to undertake research studies that would facilitate reviews of the new educational system. Studies made included issues related to streaming, language policy, and examination and testing.

A definite statement of the increasing importance of research and its role in the development and implementation of educational programs can be seen following the World Conference on Education for All in 1990. Three countries – Indonesia, the Philippines and Thailand – are now going all out to implement Education for All through research and development projects which would feed into policy decisions and implementation. In Brunei Darussalam there are also indications of an increasing importance being given to educational research. During the last few months, the Faculty of Education at the University of Brunei Darussalam has planned out several research and review projects in the general area of "Education for All" (University of Brunei Darussalam, 1991). The list included the following topics: (a) preschool education; (b) literacy programs; (c) environmental education; (d) universal primary education; (e) alternative learning styles; (f) pupil achievement in primary school; and (g) continuing education.

While educational research has still not attained its proper status within planning and decision-making, it is increasingly getting more attention, especially since several top policy-makers in education from Brunei Darussalam, Malaysia and Singapore are members of SEARRAG. This situation may improve even further with SEARRAG's plan to institutionalize policy-maker membership so that this area would be represented by the topmost policy-makers in the field of education in each country. Membership in SEARRAG will give the policy-makers the opportunity to know and share findings of educational research with their peers, and to learn how these data could and do contribute to more effective policy decisions in other educational systems. This will also contribute towards a regional system for the dissemination and further utilization of educational research at a regional forum.

Setting research priorities in education

The planning of research in the region can be seen from two levels: the national level and the regional level. Although the national level is considered more important and relevant, discussions and informal understandings at the regional level do play a role.

Several countries have established either a national research council or committees. In Brunei Darussalam, the National Council of Research

is chaired by the Permanent Secretary of the Prime Minister's Office. The National Research Council in Indonesia is chaired by the State Minister of Research and Technology. However, there has yet to be prepared a national policy on educational research in both countries. Malaysia has established a National Advisory Committee of Educational Research, chaired by the Director General of Education. As of now, it gives advice on the direction of educational research to be conducted by various divisions in the Ministry of Education, as well as by the faculties of education in the local universities.

Of more relevance here is the determining of research priorities. Many countries in the region (Indonesia, Malaysia and Thailand) base their development on five-year plans. Areas of research priorities are identified and included in these five-year plans for purposes of budgeting and acquisition of staff and personnel. The lists from Malaysia and Thailand can be taken as examples of research priorities (see Tables 1 and 2 below.

Table 1. Priority Areas of Educational Research in Thailand

1. Education and work.
2. Development of moral education.
3. Efforts to reduce the disparities of rural areas and urban poor.
4. Improving the quality of primary and basic education.
5. Educational resources.
6. Expansion of basic education to lower secondary education.
7. Sciences, technology and mathematics education.
8. Educational policy and planning.

Source: Office of the National Education Commission - Thailand, 1991.

Table 2. Areas of Educational Research in Malaysia 1992-1995

1. ***Educational Planning and Research Division***
- Teachers' workload in secondary schools.
- Co-curricular activities in secondary schools.
- Elements of unity in the National Philosophy of Education.
- Educators' understanding and implementation of the National Philosophy of Education.
- Teachers' satisfaction with work.
- The ability of secondary school teachers to conduct action research.
- Relevance of skills in primary and secondary schools curriculum program to manpower needs.
- The relation of school size to approved administrative size of school.

2. ***Teacher Training Division***
- The culture of a teacher training institute, a case study.
- The teaching of mathematics.
- Role of Islamic religious teachers in developing values in the pupils.
- Remedial teachers.
- Development of reading materials for primary schools.
- Selection and utilization of reading materials at primary schools.

3. ***Curriculum Development Center***
- School-based testing.

4. ***Institute Aminuddin Baki***
- Why are some schools labelled problem schools?
- Teacher culture in the national system of education.
- Current administration of schools.

5. ***Schools Division***
- Level of English mastery among education officers.
- Special education.
- Assessment of needs.
- Insurance coverage for school children.
- Formative evaluation of English Language Program.

6. ***Educational Technology Division***
- Effectiveness of school resource centers.

Source: Ministry of Education - Malaysia, 1991.

The planning of the education component for the Five-Year Plan in Malaysia is the responsibility of the Educational Planning and Research Division of the Ministry of Education. EPRD also acts as the Secretariat for the Educational Planning Committee which is chaired by the Minister of Education. The National Advisory Committee on Educational Research is also serviced by EPRD. The task of coordinating, monitoring and planning for educational research, in particular those conducted on the school system is also the responsibility of EPRD. All research proposals with plans to enter classrooms for data collection must get the permission

of EPRD. The Ministry provides funds for research, and each division is invited to apply for the research grants. All applications would be processed by a task force within EPRD, with representation from other divisions. These applications are then discussed at a meeting of the National Advisory Committee on Educational Research.

The determination of research priorities at the regional level can be seen from two aspects, formal regional institutions such as Unesco and SEAMEO, and regional organizations which are more informal such as SEARRAG. All countries in the region belong to SEAMEO. As a regional organization promoting cooperation in the fields of education, culture and science, SEAMEO operates through centers which conduct training and projects in its chosen fields of specialization. Each SEAMEO center operates on a Five-Year Plan of Operations, which sets out projects for training, research and development, meetings, conferences, staff development and staffing.

The preparation of each five-year plan of operations takes into account the areas of study as identified by national governments, and is discussed collectively at workshops or seminars organized for this specific purpose. Normally, theses meetings are attended by two to three official delegates from each country, and several experts in the field are invited as consultants. The subject areas are discussed, and a consensus reached at the end of each meeting. This listing would then be approved by the Governing Board of the Center, which is composed of member government representatives as well as associate members of SEAMEO. Thus, only those subject areas which are acceptable to each government are approved by the Governing Board.

If there are areas which are acceptable to some members, but not acceptable to others, this could lead to some problems since all member countries are expected to participate in all activities. Sometimes, such disagreements lead to a watered-down version of the list which would then be acceptable to all members. However, over the years, members have agreed that countries may choose not to participate in some activities if they wish. This has allowed for some flexibility in the determination of research and training priorities.

Another forum for identifying and predicting research priorities is at SEARRAG Annual Meetings, which all members normally attend. While all members occupy some official positions in the government or

other institutions of higher learning, each member attends the meeting in his/her personal capacity, and thus is able to speak professionally without having to consider the "official position" of the government. This has, in some ways, allowed freer participation by members in the discussions.

One feature of SEARRAG activities is that the group conducts reviews on areas of educational research which are important in the opinion of its members, but which may not necessarily be top priority at home. Under SEARRAG, such research areas can be given attention as these areas could be considered would-be top priority within the next few years. Thus, on this basis, SEARRAG conducted a state-of-the-practice review on the topic of values education as early as in 1985, and now this topic is an important area in many educational systems.

Meetings between the three groups of people who play important roles in educational systems – policy-makers, researchers and practitioners – are promoted through SEARRAG. The extent to which these meetings happen at the national level varies according to the countries. In Singapore, this forum takes the shape of the annual meeting of the Educational Research Association, at which research reports by classroom teachers and faculty members of the Institute of Education are presented and discussed.

In Malaysia, several attempts have been made to organize a group of middle-level policy-makers, researchers and practitioners to come together to meet and discuss issues of importance and interest. Thailand promotes biannual seminars where research reports are presented for discussion.

At SEARRAG meetings, too, some efforts are made to identify research priorities for the region. At its last meeting in May 1991, the following areas were identified as important areas for research (SEARRAG, 1991): (a) the future role of the university; (b) child and adolescent development; (c) technical/vocational education; (d) aspects of the economics of education, e.g. unit cost, cost-effectiveness in primary through higher education; (e) the type of education and training for manpower needs of the country; and (f) education and the community. It was also agreed that SEARRAG, as a group, should prepare a research agenda which could then be circulated to member countries, so that potential researchers could be given some particular direction to work towards.

Research agendas could also be identified and collected at regional meetings of Unesco. Earlier this year, Unesco organized a workshop to identify research areas for "Education for All". Representatives from Indonesia, Malaysia, the Philippines and Thailand attended the workshop. A partial list of areas for research included the following: (a) evidence of the improvement of literacy; (b) the sustainability of literacy; (c) the effect of home-community variables on pupil achievement; (d) the education of the disadvantaged; (e) the education of parents; (f) nutrition and pupil learning; (g) the education of women and girls; and (h) the evaluation of learning outcomes.

The organization and management of research in education

The conduct of educational research in the region is essentially coordinated by a research unit in the ministry of education, through its approval of research areas, its funding of projects and approval of research proposals. In many countries, the universities have allotted special funds to encourage research. However, two problems seem to be common in all situations, i.e., inadequate support systems for research and barriers to the development of collegiality for research. Support systems for research include funds, staffing, and time off, including sabbatical leave for research purposes.

Where there are adequate funds for research, personnel are encouraged to participate in research activities. But there have been cases where funds have been available and there were no applications to utilize these funds. This happens in situations where the policy of "publish or perish" does not play a big role. In such a situation, members of the faculty do not have the incentive to do research. Many of the research reports so far collected in the region are produced by graduate students; a small percentage of research reports is produced by members of faculties of education. This could be due to the fact that they have too little time to do research, or because they are not encouraged to do so. In some cases, members of the faculty may be occupied with evaluation projects commissioned by the World Bank, and therefore do not have the time to do their own research.

Another feature of research in the regions is the state of support services (such as secretarial help, and the means of collection and coding

of data) available to assist researchers. In most countries, researchers have to do these activities themselves; there are neither provisions nor funding to make these services available. There are efforts being made to provide them within the service structure, but this will take time for approval and implementation.

The problem of conducting research within the establishment of ministries of education is related to the question of time. Officials have to conduct research as part of their other responsibilities. Normally, their research projects have a lower priority as the sense of urgency for them to be completed is not there.

A case in point is a research project which was conducted in the Ministry of Education in Malaysia. A division was commissioned to do research on the effectiveness of classroom teachers who graduated from teacher training colleges and universities. The project was done as a cooperative venture between various divisions of the Ministry and some staff from local faculties of education. It took some time to design and pilot the questionnaires. The data have been collected since 1989, but the group has yet to be able to meet to analyze the data and write the report. It is in such cases that the sabbatical leaves which are granted to faculty members could also be considered for those working in the research units in the ministries. But such service matters take very long to be approved and implemented.

Staff development. Another factor which could contribute to promoting research in the system is a program for staff development. Each country has its own staff development programs, whether they are in research units or universities. These efforts to strengthen the research capacity of staff take many forms – long-term, short-term, on-the-job training, cooperative projects.

An interesting way to train junior researchers in research skills has recently been described in Thailand (Pote Sapianchai, 1991). The National Education Commission conducts research projects through two committee levels – policy committee and technical committee. Through this procedure, top executives from all concerned agencies are appointed to be members of the policy committee. Members are highly experienced resource persons who are able to assist in identifying a problem and defining the research objectives and the scope of study, as well as the methodology appropriate to the study.

The appointment of the technical committee is made parallel to the policy committee. This committee is composed of senior and junior researchers as well as research assistants. The committee serves as the secretariat to the policy committee, and carries out research activities within the framework laid down by and in consultation with the policy committee. Thus, the technical committee gets direction in all the phases of the research – research design, development of instruments, identification of data sources, collection of data, and methods of processing and interpreting the data and information collected. During the life of the research project, the two committees meet regularly to ensure that the project develops in the direction agreed upon.

This procedure has helped to avoid conflicts with the implementing agencies, as their representatives have been brought in right from the beginning of the project. These agencies then appreciate the impact of the research findings rather than feel threatened by them. Also, this mechanism provides an opportunity for researchers to orientate and relate themselves to research issues and the experiences of the implementing agencies, and thus be more sensitive to the possible utilization of their research findings.

The regular meetings between the two committees allow for interaction and exchange of ideas between the various agencies. Junior and assistant researchers also get a chance to learn the research process and methodology from their senior colleagues, thus strengthening both the analytical as well as the research capacities of the new generation of researchers.

Another mode of staff development in the region is that conducted by regional centers of SEAMEO. Each center conducts training in its own special area, e.g. language for RELC, science and mathematics in RECSAM, and educational innovations and technology in INNOTECH. Regional training of this nature provides a unique opportunity for educators and educational researchers to share and learn from each other's experiences. However, one problem which has been faced by the regional centers is the varied level of competency and mastery of the English language, which is the medium of instruction at these centers. There have been proposals to overcome this problem by giving an additional amount of time to those candidates who need to bring their English to an

acceptable level, but this means additional cost which the centers can seldom afford.

Another problem faced by this kind of regional training is to ensure the relevance of the training to the educators in such a way that they will be able to apply what they learn at home. Normally, when the training program is more than six weeks in duration, the students are expected to plan a project which they can implement in their home situation. Although students have been asked to bring with them materials which they may need to use for their project, and even though the libraries at these centers do try to acquire materials from all member countries, invariably students do not have the materials that they need, and thus their project may not be as good as expected. In addition, when the course is more than six weeks long, some government agencies are not very willing to allow the right candidates to attend the course for they cannot be spared for that length of time. There were suggestions that the course could then be broken into shorter segments, with some segments being conducted at the local level, and other segments to be done at the center. Again, this proposal could not be implemented due to limited funding.

While educational research is in the domain of ministries of education, in many countries in the region attempts are being made to ensure that the research conducted is within the national framework. Thus, where there is a national council of research (such as in Brunei Darussalam, Indonesia and Thailand) the ministry of education is represented on the council.

Funding. Funding for educational research is not confined to the budget of the ministries of education only. In many situations, the educational researcher can also apply for research grants from a central agency. In Malaysia, for example, educational researchers can also get funding for their research from the Ministry of Technology and the Environment.

Other than funds from local bodies and organizations, in almost all the countries there are funds available from external donor agencies. International agencies such as IDRC, CIDA, GTZ, the British Council, the Ford Foundation, SIDA, the Van Leer Foundation, Unicef, Unesco and UNDP, all support educational projects in the region.

In recent years, there have been some efforts in the region to become self-sufficient. The belief is that if a project, especially in the area of education, is important enough for the country, then serious efforts

should be made to find local funding for it. Thus it was that the development of the curriculum program for the primary and secondary levels in Malaysia was all funded from local sources. Foreign funding was brought in only when local funding could not be utilized, such as for travel outside of the country. Even with this emergence of the need to be self-sufficient, in some situations funding from an outside agency is looked upon as more prestigious than local funding, even when local funding is more than ample to support research projects.

Other than providing funds for projects, these donor agencies also play a role in the conduct of these projects. Most of the major research projects which have had great influence on the educational system, such as the Murad Report in Malaysia and the SOUTELLE report in the Philippines, have been conducted with funds from outside agencies. In fact, an funded expert acted as the consultant to the project in Malaysia and assisted in the designing and conducting of the research. In all cases such as these, there was always a local counterpart to the foreign expert who was assigned to acquire the skills and expertise during the project so that research expertise could then be developed at the local level.

During the early stages of research in the region, i.e., during the 1960s and 1970s, there was a feeling that the foreign experts and the local counterpart were not of the same status. But with the return of many young researchers from graduate studies overseas, this feeling has somewhat decreased. The foreign consultants and local counterparts now tend to work together as colleagues.

Research environment. There are several features in the working environment which will encourage individuals to conduct research, such as a supportive administration and colleagues. Researchers need to be able to discuss what they do, the questions they are researching with peers who are doing similar work and who are interested in the search for knowledge. This collegial relationship among researchers seems to be less than is expected, particularly among the researchers who work within the ministries of education and those working in the universities. It is almost as if the researchers work in isolation from each other, each pursuing his or her own interest and area of study.

This situation does not allow for an exchange of ideas and views, which is an essential phase in this process of enquiry. There have been efforts to bring those researchers from the research units and those

working in the universities closer. But this has met with some resistance from both sides. Those from the research units say that their colleagues from the university tend to be overly theoretical, while those from the universities feel that their colleagues working in the ministry are too rigid or are not rigorous enough.

The barriers between these researchers need to be broken down so that there can be interactions and exchanges of ideas between them. These efforts should go parallel with efforts to bring together policy-makers, practitioners and researchers to have a dialogue on issues of policies and implementation of educational projects, emphasizing that each group of individuals has a role to play. As was indicated earlier, SEARRAG is trying to promote this dialogue through the activities of SEARRAG at the national level.

This national-level networking was emphasized in the report of the external evaluator of SEARRAG (Hamzah-Sendut, 1988) who proposed that effective networking at the regional level should be accompanied by similar networking at the national level. Towards this purpose, he proposed that a group of educators representing policy-makers, researchers and practitioners should be identified and brought together regularly to discuss matters and issues of common concern.

Dissemination and utilization of research findings

Until recently, research reports have tended to remain on bookshelves, unread and untouched by policy makers, other researchers or practitioners. Efforts to interest policy-makers in these reports have elicited complaints that they are too bulky, or are written in a format and language which is quite incomprehensible to readers, and that the subject matter of the reports is of little interest or relevance to policy formulation or implementation.

Some of these statements were indeed applicable to some of the research reports available. However, many of these reports do have relevant and interesting findings which could be utilized to improve practices in the classrooms and the system.

Steps are now being taken to correct this situation. Researchers are now producing executive summaries and simplified abridged reports for

lay readers, and excerpts of reports for specific purposes. Press conferences are also being organized to publicize reports so that there can be a mention of the research findings in the mass media for public information.

The dissemination of research findings at the national level can take several forms. One popular way is to present these findings at a national seminar. Singapore holds an annual seminar for its Educational Research Association, and there is participation from the region. Thailand holds a research seminar every two years, and papers are solicited from interested researchers in the country. This forum has now become a popular venue to present research findings, in that papers have to be of a certain quality to be accepted for presentation. At this seminar, some recognition is given to researchers through an award for the best researcher. Malaysia recently organized two seminars at the national level to present research findings in the areas of school management and teacher education. The Philippines, too, has organized a nation-wide seminar on educational research through its network of the Philippine Association for Graduate Education.

Other than these national seminars, several countries are now organizing international conferences on selected topics. In December 1991, the University of Brunei Darussalam will host a conference on bilingualism. In November 1991, the Faculty of Education, University of Science in Penang, Malaysia will host an international conference on teacher education. Some seminars on education are also organized by teacher organizations. In Malaysia, the Association of Educators organizes conferences on selected themes every two years. Papers are invited on topics and issues of national interest. Some teacher unions in the region also hold conferences to discuss matters of common interest. This avenue could also be used to disseminate information on education to a larger audience.

Regional seminars are also organized by the SEAMEO centers. RELC hosts a regional seminar on selected themes on language every April. INNOTECH will be hosting its third international conference in November 1991. SEARRAG is now working on a series of reviews on projects in Education for All, and plans to organize an international seminar in the region on this theme in late 1992 or early 1993. Other than the national seminars in Singapore and Thailand, and the annual

regional conference organized by RELC, seminars and conferences tend to be organized as and when the need arises.

Projects are initiated at the national and regional levels to ensure that research findings are disseminated more widely. In Indonesia, Malaysia, and Thailand, the major unit for educational research within the government setting has been given the responsibility of collecting and disseminating information on research. Thus, BALITBANG DIKBUD, the research unit in the Ministry of Education and Culture in Indonesia, collects all research reports available in the country. The Educational Planning and Research Division of the Ministry of Education in Malaysia collects research reports on Malaysia for references. The National Education Commission in Thailand has been designated to be the Information Centre for Education (ICE) for Thailand to coordinate, collect and disseminate educational information, statistics and research works.

At the regional level, two organizations, i.e., INNOTECH and SEARRAG, have taken on the responsibility of collecting and disseminating information on education. Since the 1980s, INNOTECH has developed an Educational Management Information System (EMIS), focusing its attention mainly on educational statistics. This was a regional project, and all SEAMEO member countries participated in the project. EMIS has since been followed by Project REIN (Regional Educational Information Network), which is essentially designed to collect and collate documents and information on the educational policies of each country. REIN will not collect information on educational research; this is the focus of SEABAS, the information service developed by SEARRAG.

The Southeast Asian Bibliographic and Abstracting Service (SEABAS) grew out of the first project conducted by SEARRAG, the documentation of the research environment of each member country. (Brunei Darussalam only became a member in 1986 and is still in the process of studying the national research environment). Each project collected a bibliography of educational research done in the country. Each bibliographic item is accompanied by an abstract which contains information such as the project design, major findings, implications for policies, and instrumentation. With every state-of-the-art or state-of-the-practice review of specific areas of research, further research abstracts are collected and added to the service. To date, there are about 3,700 bibliographic items and about 2,000 abstracts in the system.

SEABAS has its regional office in the University of Science in Penang, Malaysia, with a national office for each member country as follows: *Brunei Darussalam* - University of Brunei Darussalam; *Indonesia* - BALITBANG DIKBUD, Ministry of Education and Culture; *Malaysia* -Educational Planning and Research Division, Ministry of Education; the *Philippines* - National Testing and Research Centre, Department of Education, Culture and Sports; *Singapore* - Institute of Education; *Thailand* - National Education Commission. Each national center has utilized the system to store information of national interest. SEARRAG hopes to utilize the information in SEABAS to produce bibliographies on selected topics of interest whether at the national or regional levels. In preparation is a volume of the abstracts of all doctoral dissertations on educational research on Malaysia. Similar volumes for other countries will also be produced.

The dissemination of information on education at the national and regional levels is also done through educational journals. The Educational Research Association (ERA) produces a quarterly and the proceedings of its yearly meeting. Journals are also produced by different divisions in the national ministries of education. In Malaysia, the Federal Inspectorate produces a journal for the Ministry of Education, and it contains reports of projects and research done in other professional divisions.

Many institutions of higher learning produce their own journals as a means of disseminating information on their projects and research. At the regional levels, the SEAMEO centers, in particular RELC, RECSAM and INNOTECH, each produce either a journal or newsletters which contain information of their programs and the activities of their alumni. These publications also serve to disseminate information on research projects conducted either at the center or by their graduates.

One interesting publication which serves to bring research findings to light is a collection of abstracts known as *Research and Evaluation Abstracts for Classroom Teachers* (REACT), produced by the Ministry of Education in Singapore. Each edition of REACT is a collection of research articles presented in a readable form with "terminologies and technical details reduced to a minimum". Among the issues covered by REACT are English language teaching, the teaching and learning of mathematics, classroom management, moral education, educational testing, teaching of slow learners and educational media.

Future directions for educational research

The state and future of educational research in the region should be viewed from three aspects: (1) areas for research, (2) the research process, and (3) utilization and dissemination.

Areas for research

Over the last decade, with the establishment of various regional centers, several research and development projects in the areas of teacher education, primary education and alternative delivery systems have been conducted in the region. Noting the state-of-the-art and state-of-the-practice reviews conducted by SEARRAG during the period 1985 to 1991, covering the topics of teacher education, school management, primary school curriculum innovations, values education, language education, learning outcomes, science and mathematics education, it is clear that much research has been done in these areas in all countries.

In the next decade, the following areas would be priority areas for further research:

1. *Basic Education.* Following the World Conference on Education for All, the region has paid increasing attention to the following areas: preschool education, primary education, lower secondary education, literacy, community/continuing education, environmental education, and education of the disadvantaged. Some of the topics under study include the effects of home-community variables on pupil achievement, sustainability of literacy, nutrition and pupil learning, evaluation of learning outcomes.
2. *Environmental issues.* With rapid economic development and industrialization in all countries, environmental issues are receiving more attention. These include the economic and moral issues of industrialization, our role in maintaining the environment, and how schools can help prepare children to do their part in preserving the natural environment.
3. *Child and adolescent development.* Issues to be dealt with here include the development of the whole child, i.e., intellectually,

emotionally, physically, and spiritually, and how children cope with the changing world, with differing value systems in the school, with peers and family, and the development of a positive self concept.

4. *The economics of education.* With the traditional focus on higher education and the current emphasis on basic education, some choices must be made due to scarce resources (funds, teachers, and facilities). Among potential areas of study would be unit cost and cost-effectiveness by level of education.
5. *The teacher as a researcher.* An area which is gaining interest throughout the region is the potential contribution of teachers to increasing the quality of education in the classrooms. Teachers as researchers are encouraged to reflect on their classroom practices, on improving their techniques, and on documenting these experiences for sharing with colleagues in the school, and through discussions, seminars and publications.
6. *The role of the community.* The involvement of members of the community in educational activities is now being encouraged. Cooperative efforts could be undertaken between schools and members of the community, in terms of assistance in provision of facilities and funds, expertise in specific skills and knowledge, and support systems. Such efforts between the school and the community will help to bridge the gap between the home and school.
7. *Human resource development.* Training for employment is an important program in the region. Rapid industrialization and the diversification of an economy require that the educational system prepare students for immediate employment or provide training for specific skills. The stigma attached to technical and vocational educational programs are slowly decreasing, and countries are developing major projects in these areas.

The research process

The research process includes the training of technical staff to conduct research and developing the infrastructure necessary to promote educational research within the educational system. Structural support,

such as the provision of clerical and secretarial assistance, field workers, paper, and funds, are necessary to encourage potential researchers to venture into research.

Time is also another item which should be given further consideration. In some instances, a person who is expected to conduct research projects needs to be employed full-time, so that proper thought and attention can be given to all phases of the research. The service system should provide for flexible time scheduling so that research can get the time and attention required.

With the objective of encouraging teachers to conduct classroom-based research, provisions such as short sabbatical leave, funds, and opportunities for exchange of ideas and discussions need to be arranged for teachers within the school system.

Another important ingredient in facilitating the research process is collegiality among researchers. It is through discussions and exchanges of views, opinions and findings that researchers are able to refine their work, and rephrase their questions.

In some countries, the availability of funds for research may be a problem; in other countries funds have been provided for institutions of higher learning. In a situation where there is ample funding, the reward for doing educational research should be an important consideration. A reward system in terms of promotion opportunities and funds should also be given attention.

Staff development programs which include formal training, on-the-job training, and apprenticeship in research projects could be planned. A successful case which could be studied and further enhanced is the procedure of conducting research reported by the National Education Commission in Thailand, whereby junior researchers work side by side with senior researchers, with the involvement of policy-makers, planners, and practitioners. This procedure helps train junior staff and makes it easier for the research findings to be utilized by policy-makers and practitioners.

Utilization and dissemination

Although numerous research reports are available, many of these have not been utilized in decision-making by the policy-makers. Some reasons

given include the narrow scope of research, the length of time needed to conduct research and release findings, and the fact that the problems researched are not relevant to policy-makers. Thus, for research findings to be better utilized there has to be some amount of change and rethinking about the research areas and research design.

From the listing of reports which did not get utilized for policy decisions it was noted that a report would be more useful if the project were initiated by the policy-makers. Exposure and discussion among peers would encourage policy-makers to realize the need for research findings to feed into projects, and therefore they would feel the need to initiate relevant research projects and provide the funds for these projects.

The dissemination of research findings should be encouraged through publications including a regional journal. The Southeast Asian Bibliographical and Abstracting Service (SEABAS) can be further utilized to disseminate information at the local, national, regional and international levels.

Conclusion

The position of educational research as an activity to assist in making educational policy decisions and implementation in Southeast Asia is stronger now. Several countries are now looking towards research findings to review and revise educational policies. Efforts by SEARRAG to collect and disseminate research abstracts will also assist in strengthening the process of research in the region.

Until recently, the framework for knowledge and research activities has been based upon the Western model. There are definite steps in the region, notably in Malaysia, to utilize alternative models such as the Islamic framework. Whether this idea will spread to other parts of the region remains to be seen.

References

Gopinathan, S. and Nielsen, H.D. (eds.) 1988. *Environmental Research Environments in Southeast Asia*. Singapore: Chopmen Publishers.

Hamzah-Sendut. 1988. "Evaluation Report on the Southeast Asian Research Review and Advisory Group", report submitted to the International Development Research Centre, Singapore, (unpublished report).

Ministry of Education - Malaysia. 1991. *List of Research Topics 1992-1995*, Educational Planning and Research Division.

Moegiadi. 1991. "Strengthening Analytical and Research Capacities in Education: The Case of 'BALITBANG DIKBUD' in Indonesia", paper presented at Meeting on "Strengthening Analytical and Research Capacities in Education - Lessons from National and Donor Experience", organized by the German Foundation for International Development (DSE).

Office of the National Education Commission - Thailand. 1991 Priority Areas of Educational Research in Thailand, (memo).

Pote Sapianchai. 1991. "Strengthening Analytical and Research Capacities in Education: Lessons from the Thai Experience", paper presented at Meeting on "Strengthening Analytical and Research Capacities in Education - Lessons from National and Donor Experience", organized by the German Foundation for International Development (DSE).

SEARRAG. 1991. Proceedings of 9th Annual SEARRAG Meeting held in Bandar Seri Begawan, Brunei Darussalam. Southeast Asian Research Review and Advisory Group.

University of Brunei Darussalam. 1991. World Conference on Education for All: Review/Research Proposals from Negara Brunei Darussalam, memo to Vice Chancellor from Project Coordinator.

World Conference on Education for All. 1990. "Meeting Basic Learning Needs: A Vision for the 1990s, Background Document", New York.

Educational Research in China: An Overview of the Current Situation

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As education plays an increasingly important role as a vital instrument of social and economic development within the developing world, educational research has been valued for its contribution in the rationalization and, consequently, in the increased efficiency of education systems and the educational process (Unesco, 1983). While encouraging progress has been made in various areas of educational studies at an international level, many challenges confront the educational research communities in developing countries.

In the case of China, the 1980s and early 1990s have witnessed an unprecedented upsurge of and progress in educational research. While education is accorded a high priority status as the foundation of national modernization, educational research has been stressed as the basis of rational policy-making on the one hand and improved teaching-learning practice on the other. A national network of educational research institutions has developed and the contingent of full-time professional researchers and part-time teacher/researchers has been expanding. Planning of research at both national and local levels has been strengthened. The quality and effectiveness of research projects have improved and the impact of research is increasingly making itself felt in

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the practice of educational development through the wide dissemination and application of research findings. Meanwhile, problems exist in data collection and utilization, in the qualifications of research staff, in the development of infrastructure, in the development of a theoretical framework and methodological approaches, and in increasing the demand for quality educational research.

This paper presents the case of educational research in China and, based upon national experiences, offers some personal perspectives on the research capacity-building of developing countries in general. It consists of four sections: the first deals with research structures, policies and priorities; the second describes the organization and management of educational research; the third accounts for the dissemination and utilization of research findings and information; and the last section discusses aspects of educational research capacity-building relevant to developing countries.

Structures, policies and priorities of educational research

Educational research in China is a well planned and highly organized undertaking. An organizational structure for developing research projects exists at both national and local levels. Policy guidelines for research are formulated by a central authority and research priorities are determined in light of national socioeconomic and educational development goals as well as through central and local mechanisms.

Under the general supervision of the State Education Commission (SEC), the central mechanism for organizing research projects is the National Steering Committee on Educational Research Planning (NSCERP). The research structure consists of basically two parallel yet interacting systems of research organizations. One is governmental, including educational research institutes affiliated to the educational administrations at central and local levels, and the other system is composed of semi- and non-governmental mass academic organizations, with the Chinese Association of Education being the largest one. While orientation, policies, research priority fields, forms of funding arrangements and macro-level evaluation are laid down by central government agencies, a decentralization process is taking place in the

design and implementation of research projects. There is also a trans-sectoral coordination of research undertaken within the education sector *per se* and with those outside education.

National structure and central mechanisms

At the top of the structure is the State Education Commission, a trans-ministerial agency under the State Council, which is the highest educational administrative authority and which is also responsible for providing guidelines for educational research. The Commission formulates five-year and ten-year educational development plans, upon which both educational research policies and priorities are to be based. The Commission also allocates funds for educational research projects through two channels: its own departments which sponsor policy-oriented studies, and the NSCERP for "SEC-level priority" projects. Within the State Education Commission, the Department of Policy Studies and Legislation, and the Center for Studies on National Educational Development, focus on macro-level education planning and long- and medium-term educational development strategies.

The National Steering Committee on Educational Research Planning was set up in 1987 to provide concerted leadership in research. It is chaired by the former Education Minister and current Vice-Chairman of the State Education Commission. Central professional mechanisms for educational research include both the NSCERP with its sub-committees and the National Steering Committee for Social Sciences Research Programming, which is responsible for the final approval of national-level priority projects recommended by NSCERP, and for the actual funding of these projects with grants allocated by the State Planning Commission.

The NSCERP is composed of high-ranking educational policy-makers, prominent specialists/scholars and outstanding educational practitioners. Members are appointed by the SEC for five-year terms of office. The major functions and roles of NSCERP include the following:

- to formulate educational research programs and development plans in light of national socioeconomic development programs and educational reform needs;
- to review and approve major research projects at the national level;

- to identify and publicize study projects to be undertaken;
- to administrate and monitor the implementation of national and ministerial study projects;
- to organize evaluation of major research projects;
- to coordinate nationwide research programs and disseminate research findings;
- to review and recognize excellent research work;
- to provide advice concerning policies and measures for the development of the educational sciences; and
- to secure and allocate funds for priority projects.

Under the NSCERP there are 12 sub-committees for the planning of research in different areas of educational studies. These sub-committees are divided according to the following disciplines and areas: educational theories, educational psychology, history of education, moral education, comparative education, elementary/secondary education, technical/vocational education, higher education, adult education, educational development strategies, educational administration, and inter-disciplinary/inter-departmental fields. The NSCERP-established priority projects are submitted to the National Leadership Group on Social Sciences Research, which is responsible for the final approval of national-level priority projects and for the actual funding of these projects with budgetary grants from the State Planning Commission.

An organized system of educational research institutes exists at national and local levels. At the national level the National Institute for Educational Studies (NIES) functions as the only national university-level institution in educational research, and as the research arm of the State Education Commission. NIES, with its staff of over 400, plays a key role in formulating research policies, conducts and coordinates study projects by local and university-based research institutes and disseminates research findings. At the provincial and municipal levels, there are institutes of educational research in each of the provinces and centrally-administered municipalities. Full-time researchers at national, provincial and municipal institutes numbered 1,500 in 1990.

In 770 of the more than 1,000 universities and colleges there have also emerged institutes, centers, offices and/or units of educational studies, with a total number of over 3,000 researchers. At rural/county and

urban/district levels there are "divisions of research on school subject teaching" affiliated to educational administration at the same level, with a total of 120,000 full-time staff members (SEC, 1990). Local research institutions submit their research proposals to the NSCERP for review and for possible funding on a rather competitive basis. At local school levels, educational research projects can also be proposed and submitted to educational authorities at a higher level.

The second system in the national structure of educational research is composed of associations and professional societies of education. As academic research-oriented organizations of the broad masses of educators, national associations and professional societies have been formed to promote educational research at the grassroots level. The Chinese Association of Education, founded in 1979 as a multi-disciplinary and multi-level network, has had over 800,000 institutional and individual members, 35 affiliated professional societies, 29 provincial societies, over 400 municipal and prefectural societies and nearly 1,000 societies at the county level (CAE, 1990). There are also the Chinese Association of Higher Education, founded in 1983; the Chinese Association of Adult Education, founded in 1988; and the Chinese Association of Technical/Vocational Education, founded in 1990.

Promotion of national policies

Efforts have been made to promote national research policies for the appropriate orientation, coordination, and evaluation of the efficiency and effectiveness of educational research projects. Major aspects of national research policy include the following:

- Research should be oriented toward major theoretical and practical issues in socialist educational development and reform and should be aimed at assisting scientific decision-making in education.
- Stress should be laid on applied research with due attention paid to basic research (for example, of the 36 national-level priority projects for the Sixth Five-Year Plan period, 64 percent were of applied nature, while 17 percent were for basic research, and 19 percent were for comparative studies).

- Educational issues should be studied from broad social, economic and cultural development perspectives.
- Theory should be integrated with practice, which implies that research ideas are derived from and guide educational practice.
- Researchers should cooperate with administrators, policy-makers and teachers, and the education sector should cooperate with non-education sectors.
- There should be cooperation in research between the school, the family and the society at large.
- Traditions in Chinese education should be preserved while elements of modernization are introduced into education.
- Foreign research paradigms and approaches should be adapted to national and local contexts.
- National policy-making and overall coordination should be fully supported by local initiatives, and all relevant parties should fully participate in the design, implementation and evaluation of research projects.
- Freedom in scientific inquiry should be encouraged.
- Popularization of educational sciences among practitioners should be combined with sophisticated quality work done by professional researchers, with the former undertaken under the guidance of the latter, and the latter based on the former.
- Results and findings of research projects should be widely disseminated and applied in educational practice.

Mechanisms for assessment of research and its impact

At the national level, review and assessment of research is undertaken by the National Steering Committee on Educational Research Programming and its 12 sub-committees. Both formative and summative evaluations are made of priority research projects. Stress is laid on the relevance of the proposed study, adequacy of research designs, qualifications of the research team leader and members, the potential value in the application of the expected findings to practice, and availability of resources apart from state grants. An annual and interim progress report are required from each priority research project team and consultation and guidance is

provided to research teams by the NSCERP and its sub-committees. When a priority project is completed and a self-evaluation report is presented by the research team, a final assessment is made by the NSCERP and a related sub-committee and a group of invited experts and scholars. An official report of assessment is written and included in the file of the research project under review.

As a form and measure of assessment of research, in 1988 the NSCERP sponsored the first national assessment of and award for outstanding research under the supervision of the State Education Commission,. A total of 57 first-place awards and 100 second-place awards were granted, and most of the research findings of these awarded research projects were published.

At the local level, educational research and its impact is usually assessed by the academic committees of research institutions and by administrators at a level higher than the institution. Grassroots' studies of an applied nature are often reviewed and assessed by peer teachers and other educational professionals.

As should be clear, there are a number of mechanisms at various levels for the assessment of educational research. One example highlighting this is the study on "Tutoring for Self-Learning of Mathematics in Junior High Schools" started in 1965 and presently implemented in over 5,000 experimental classes in 29 provinces. This study has been assessed and re-assessed by national and local school review committees, involving mathematics teachers, mathematicians, university faculty members, psychologists, curriculum development specialists and educational administrators, on the basis of numerous comparative data gathered on mathematics achievements of controlled and normal classes over the years. As a result of the assessment, a set of mathematics textbooks based on the findings of the study have been compiled and used in an increasing number of schools.

Another example which further highlights the multi-level and multi-actor mechanisms for assessment as well as the link from research to educational practices is the national experimental study on "The Integration of Abacus and Mental and Written Calculation in Teaching of Arithmetic". This study, conducted by the research staff at the National Institute of Educational Studies over some ten years in 29 provinces and autonomous regions, was reviewed and assessed in various ways. The

underlying philosophy and assumptions were first assessed from psychological, cultural, technological and pedagogical perspectives by experts from research institutes and the Chinese Abacus Association and the Three-Calculation Teaching Society. The impact and results of the unique teaching methodology were more widely assessed by thousands of teachers participating in the experiment and educational administrators of experimental schools and counties. Parents were also involved in giving their observations. The Department of Elementary and Secondary Education at the State Education Commission, as the highest administrative authority, also gave positive assessment of the experiment and officially recommended wider use in primary schools of the arithmetic textbooks developed on the basis of the experimental study.

Involvement of teachers in research

Teachers are the core force of the educational enterprise. It is the teachers who actually determine the quality of education and who are responsible for the application of research findings to school practice. Accordingly, teachers have been increasingly involved in educational research. They have been the most active force in research activities organized by associations and societies of education at both national and local levels.

In most cases teachers undertake part-time research on school subject matter and teaching methodology; in some cases they participate in holistic/comprehensive reform experiments. Many of their efforts in research are spontaneous, out of felt needs for greater relevance of educational content and for higher effectiveness of instructional methods; some of their research endeavors are organized by related educational authorities at school or higher levels, or through professional societies of which they are members.

Some examples, representative of the active involvement of teachers in research are briefly described below:

- Li Jieling, a primary school teacher in Jiangsu Province, has been conducting successful experimental studies since 1978 on the "situational teaching" of the Chinese language for pupils' coordinated all-round development, with findings and results summarized in a monograph.

- Wei Shu-sheng, a primary school teacher, was awarded the title of National Model Worker for his experiments and study on the development of self-learning capacity of under-achieving pupils by applying psychological principles and learning theories.
- Teachers of Fenglingdu High School in a rural area of Shanxi Province have applied holistic approaches in comprehensive experiments on the integration of teaching, production and research for rural community development.
- Li Gennan, a Nantong No. 12 High School teacher in Jiangsu Province conducted a fruitful study on the teacher-guided self-learning of junior high school students in Mathematics.
- Teachers of Beijing Jingshan School have persisted in long-term experiments on integrated school reforms and future-oriented education at primary and secondary levels.

Determination of research priorities

Priority fields of educational research are determined according to the objectives of national socioeconomic development programs, are based on the practical needs of educational development and reforms, and are funded in light of the availability of resources. The necessity to develop educational sciences is also taken into account in determining priorities.

For the Seventh Five-Year Plan period (1986-1990), educational research placed highest priority on reforms of education (Wu, 1986) and had the following aims:

a) provision of a theoretical framework and alternatives for decision-making in educational reforms;

b) disciplinary development in various areas of the educational sciences;

c) professional development of a rank of qualified research personnel;

d) identification and operation of selected districts and schools for educational experiments; and

e) improved infrastructure, with effective information services and advanced research instruments.

As mentioned above, the number of priority fields and projects is determined by research needs and limited by the availability of research funds. For the Sixth Five-Year Plan period projects (1981-1985), 17 projects were undertaken at the national level and 19 within the Ministry of Education. Among the major projects, the following are included as representative of the nature and types of projects pursued:

1. Rationalizing the proportion of public educational expenditure in national income and the measurement of cost-efficiency of educational investments.
2. A study on the structure of Chinese higher education programs by fields of study at different levels.
3. Characteristic features of the psychological development of Chinese children and their education. The study was conducted through surveys, experiments and the testing of 10,000 sampled children, resulting in more than 200,000 data items and multi-functional instructional toys for children's intellectual development through game playing.
4. A study on education in rural China, which applied a holistic approach to the interaction between education and socioeconomic development, by means of case studies in 13 counties in three regions.
5. Causes of and solutions to prevailing tendencies to seek higher promotion rates without due regard to all-round development of the majority of students.
6. Educating school and college students in patriotism.
7. Reform and experiments on school curriculum, textbook, teaching methodology and length of schooling.
8. The forecasting and planning of specialized manpower training which was a nationwide survey study involving staff from the Ministry of Education, the State Planning Commission, and Ministry of Labor and Personnel as well as educational researchers. It was based on questionnaires and interviews of employed workers and staff members within various sectors.

For the Seventh Five-Year Plan period (1986-1990) there were 33 priority projects at the national level, 90 at the State Education Commission level, and 27 undertaken by other ministries and

commissions. In addition, a larger number of local-priority projects were sponsored by provincial and municipal agencies.

While further research will be needed on many of the topics selected for study in the past ten years, new priority fields have recently been promoted for the Eighth Five-Year Plan period (1990-1995). Among the priority fields and topics the following are included:

- Rural educational development and reform and/or rural socioeconomic development, with emphasis on the integration of agriculture, science and education and the coordination of general education with technical/ vocational and adult education.
- Combination of education and work.
- Mao Zedong's thoughts on education.
- Philosophies of education and practice of educational reforms in China and other selected countries.
- Psychology and moral/value education of college students.
- Reform of high school graduation and college-admission examinations to facilitate a shift from purely academic, college-bound education to student development oriented education.
- Structural reform of post lower-secondary education in China.
- Education of girls in rural areas.
- Intellectual and non-intellectual factors in Chinese child and juvenile development.
- School instruction innovations: experiences and evaluation.
- Reform and innovation of general secondary and primary schools in light of challenges of scientific/ technological advances in the 21st century.
- Reform of teacher education and in-service training for professional development.
- Technical/vocational education in light of the German experiences.
- Factor analysis, measurement and the development of self-learning capacity in junior high school.
- Reform of educational administration system with focus on the expansion of the decision-making power of local authorities while improving macro-level supervision.
- Reform of the system of educational financing, with stress on diversification of sources of funding and means of collecting fees.
- Regional and community education development strategies.
- Literacy programs toward education for all.
- Major issues in education for national minorities.
- Evaluation of higher education programs: system and policies.

- Schools for the 21st century.
- Within country comparison of educational development models in coastal developed areas and inland underdeveloped provinces.
- Development of a data base for the educational sciences and the consolidation of the national network of educational information.

To promote these priority fields, a national meeting was convened in August 1991 by the National Steering Committee to review and approve research proposals on the priority fields and topics for funding from the central government. As a result of this gathering, a number of decisions were taken and solutions sought for which concern research in this field, including: the methodological design of research projects was improved through consultation with experts; institutions and counties were identified for case studies and experiments; collaboration between institutions in different regions and sectors was encouraged; and evaluation and monitoring were built into the mechanisms for the implementation of the major research projects.

Organization and management of educational research

Educational research is organized and managed at different levels in correspondence to the administrative structure of the educational system.

Determination and financing of research projects

Nationwide programming is implemented through the National Steering Committee on Educational Research Planning and its office located in the National Institute for Educational Studies. Programming is done according to identified research needs and priorities and a process of reviewing and approving proposed priority research projects.

Priority projects are generally of two types: (a) self-proposed projects by individual institutions and researchers submitted to the office of the NSCERP. The number of research proposals for funding is limited to four for each province and two for SEC departments and affiliated institutions and major universities; and (b) guided projects proposed by the NSCERP for nationwide public bidding with equal competition, and

merit-based selection. The number of proposals for these projects is not limited.

Applications for priority research projects are first approved by the administrative heads of the institution where the applicant is employed. After a preview and screening at ministry level, these proposed research projects are submitted to the NSCERP for review and approval. To encourage and support research efforts by young scholars and educators, the NSCERP has allocated special grants from the state budget for study projects proposed by researchers. A review of these proposed projects is conducted together with other proposals.

Projects are financed according to their level of priority and the sector from which the applying project-team leader works. National-level priority projects are financed by the State Social Sciences Funds; Ministry or Commission-level priority projects are funded by grants from the SEC or by other related ministry or state commissions; ordinary research projects are financed by provincial and municipal agencies or by the colleges to which they are submitted for support.

In recent years a policy to diversify sources of funding for educational research has been implemented. While state grants remain the major source of financing, efforts have been encouraged to collect funds from business enterprises, mass organizations and individual donors. Of related interests, a National Educational Sciences Fund and its preliminary regulations have been proposed for final approval.

Research personnel and their training

A nationwide survey in 1990 identified a total of 5,820 full-time researchers in 688 educational research institutions. Of these institutions, 52 were provincial or municipal institutes, 16 were at prefectural and lower levels, 98 were in teachers colleges, 325 were in other higher education institutions, 20 were in institutes of education, and five were in Ministries or Commissions. NIES has the largest staff of an individual research institution with a total of nearly 400 members. On the other extreme, small institutions might have only two or three research staff members.

Most project teams are composed of researchers, teachers and administrators. This three-in-one combination is conducive to the

integration of theory and practice and to the cross-fertilization of members from different backgrounds. Trans-sectoral and inter-regional cooperation is encouraged for certain research projects. For example, studies on regional or community educational development models and strategies could involve researchers, government officers, planners, scientists, and labor department personnel from different provinces.

Programs for the training of researchers are of two major types: formal graduate education at research universities and in-service training of researchers for upgraded professional development. Diversified means are employed for in-service training, including paid study-leave for advanced courses at universities, part-time graduate study, national and local research seminars and workshops on related topics, and study visits abroad for the upgrading of professional knowledge and skills. Among the major areas of training are the methodology of evaluation studies, theories of education and national development, and the development of indicators of educational achievement and quality.

The organization of educational research

Generally speaking, there has been an improved division of responsibilities and collaboration between various research institutions. University-based research tends to follow along disciplinary lines and is more related to the teaching of graduate courses, though some university affiliated research institutions occasionally take part in government-sponsored research. National institutes undertake both applied and basic research with stress on the former, while local institutes concentrate on school-related action research. Research units within governmental agencies mainly conduct policy-oriented studies for overall planning and macro-level development strategy and management. However, there are increasing interactions among the various institutes in joint research ventures, and the gap between research institutions and government agencies is being reduced.

Research institutes outside the education sector have also played a role in educational research. A major contribution was made by economic research institutes in the late 1970s and early to mid-1980s on topics such as the economic value of education, the desirable proportion of the national income to be allocated to public educational expenditure,

mathematic models for the measurement of economic returns of investment in education, the mechanisms for financing education, and the development of the economics of education as an academic discipline.

There have been collaborative research efforts among education and other social sciences. A good case in point is a Unicef-funded comparative study on "Basic Education and National Development in China and India", the Chinese part of which was undertaken by the Shanghai Institute of Human Resources Development with a team composed of specialists from several disciplines. Another example is the symposium on "The Dilemmas of Education and Strategies for Their Solution" sponsored jointly by the Shanghai Society of Education and the Shanghai Association of Social Sciences in 1989, which included over a dozen disciplines such as political science, economics, and philosophy. Institutes of social research have conducted studies related to the role of education in social and cultural development. Among their topics for study have been: women's education, employment and political participation; family planning and education; the role of the family in education; community development and education; leisure education for retired professionals and for the aged; and values change in and psychological traits of contemporary college students.

Over the years, the Educational Committee of the Chinese Council of Political Consultation and some of the eight democratic political parties which the Council represents have also organized educational studies, which are usually undertaken by senior scholars and professors who are concerned with educational development. The results and findings are often submitted to high government authorities for improved decision-making in education. Also a number of Institutes and Centers of area studies have occasionally done studies on education in a particular region. For example, Xiamen University Institute of Southeast Asia Studies has published studies on education in such countries as Singapore, Malaysia, the Philippines and Thailand.

International cooperation in educational research

Along with the implementation of an open-door policy, cross-national educational exchanges have been developed between Chinese and international research communities.

Among the major international organizations which have participated or assisted in educational research undertakings are Unesco and its Regional Office for Education in Asia and the Pacific in Bangkok, as well as its IIEP, IBE and UIE; UNDP, Unicef, UNPF the World Bank, IEA and WCCES. Cases in point are:

- A Unicef project on preschool education which included experiments on reforms in teaching and learning, survey studies on the physical and mental health of children, and experimental textbook development.
- A US$15.5 million grant from Unicef for four projects in the 1990-94 period dealing with the relationship of kindergartens to primary schooling, the use of distance education (via satellite communication) in the training of preschool and primary school teachers, the planning of basic education, and the improvement of primary education.
- A US$2.967 million grant from the UNDP for the training of educational administrators and distance vocational education.
- A US$5.7 million grant from the UN Population Fund for the 1990-94 period on demographic studies and training.
- A proposed World Bank loan (approximately US$100 million) for teacher education programs, which will include teacher training related studies.

The major roles and responsibilities of international agencies in educational research in these projects include one or more of the following: funding for sponsored or contract research; granting of loans; advisory services; training; and joint research cooperation. Research institutes, universities and individual scholars in many foreign countries, both developed and developing have also collaborated with Chinese researchers in this field. Their roles are mainly in the implementation of collaborative research projects and in graduate level training.

Dissemination and utilization of research findings

The dissemination and utilization of research findings are seen as an important part of the educational research enterprise and as a basic means

of expanding the positive impact of research on educational practice. Though much remains to be improved, these areas have been accorded increasing attention.

Research findings of major projects are disseminated in quite an organized way through national and local networks. The National Steering Committee on Educational Research Programming takes the dissemination of findings as one of its responsibilities. It assists in publicizing the reports and findings of national-level and ministerial-level projects through workshops, newsletters, administrative documents and through other means.

The State Education Commission, as a major user of research findings for decision-making, bases many of its policies on applied research in education. More often than not it disseminates findings of nationwide significance through its publications and policy documents. The utilization of educational research findings can be highlighted in the following three examples:

1. Many of the development guidelines formulated by SEC's Department of Primary and Secondary Education are based on survey studies made by research institutions.
2. The results of experiments which have been conducted by researchers at the National Institute for Educational Studies in the teaching of elementary arithmetic, and in the nature of the Chinese language, have been incorporated into school texts recommended by the Commission for use in many provinces.
3. Many of the national educational development plans formulated are based on the results of studies on long- and medium-term development strategies made by the Center for Educational Development and related departments within the Commission.

The National Institute for Educational Studies facilitates the dissemination of research findings through various means. For example, a series of workshops have been organized for training teachers in utilizing, for instructional purposes, an intellectual learning toy which was developed from findings of a psychological study on child learning and intellectual development. For another example, an experimental study on the teaching of fine arts and the making of handicrafts in primary schools has resulted in a national TV program for instructional purposes.

Both national and local groups as well as professional societies and associations of education have done much for the dissemination of research findings. For example, the Chinese Association of Education has had a network of its own experimental schools for reform at elementary and secondary school levels. Through this network, experiences in outstanding teaching are summarized and disseminated through meetings, observation classes, training seminars and recognition. There has also developed a National Network of Educational Information, consisting of over 800 centers, offices and/or units at national and local levels, with a total of more than 2,000 full-time staff members. Dissemination of information on research findings is one of its functions. Teacher education institutions (including 1,021 secondary normal schools, 179 junior teachers colleges, 77 four-year teachers' colleges) and in-service teacher training institutions (including 265 institutes of education and 2,018 teachers' upgrading schools) disseminate and utilize practice-oriented, and teaching-related research findings.

There have been diverse ways and forms of disseminating educational research information and findings, including publications, conferences and colloquia, the media, and libraries and resource centers.

Presently there are over 600 educational journals at the national and provincial/municipal and higher-education institutional levels. Among the leading research journals are *Educational Research*, edited by the National Institute for Educational Studies; *People's Education* and *Chinese Higher Education* published by the State Education Commission; *Journal of Chinese Education* published by the Chinese Association of Education; *Journal of Chinese Higher Education*, published by the Chinese Association of Higher Education; *Comparative Education Studies*, jointly published by Beijing Normal University and China Comparative Education Society; and *Education and Vocation*, published by the Chinese Society of Vocational Education. Unfortunately, these journals are only available in Chinese. Additionally, educational presses have published hundreds of educational research-based monographs, textbooks, reports and surveys.

Conferences and colloquia have also played a vital role in disseminating research results and promoting exchange. Two recent examples to illustrate this are: (i) "The International Conference on Rural Education", with participants from 24 countries, was co-sponsored by the

State Education Commission and the Chinese National Commission for Unesco, last June in Taian, Shandong Province (here, experiences of comprehensive reforms in China's rural education for rural socioeconomic development were widely disseminated); and (ii) in May 1991 a national seminar was organized in Beijing by the National Institute for Educational Studies and Unesco on the methodology of evaluation of the implementation of reforms in primary and secondary education. At and through the seminar, results and findings of evaluative studies on the Chinese experience with educational reforms were presented, and a Final Report was subsequently circulated by Unesco.

There have been a great deal of research findings popularized through media. *China Education Daily* and *Guangming Daily* are two leading national newspapers which are targeted at educators and which frequently report research findings. *Education Abstracts Weekly* has been widely distributed for information about major research undertaken. The national educational TV station has televised programs on a variety of topics based upon or relating to research findings. Another example that deserves attention is the National Center for the Study and Production of Audio-Visual Aids which has been established at NIES to promote the dissemination of research findings by multiple media.

The important role of libraries and resource centers cannot be underestimated. The Beijing National Library, the Education Library of NIES, and the Education Information Center of SEC, as well as libraries and information divisions at provincial and municipal administration agencies and many universities collaborate in providing wide access to research findings.

The utilization of research findings is closely related to the needs, expectations and interests of the potential users. Different categories of users have different and often conflicting interests in and needs for research. Researchers tend to be more concerned with development of new knowledge for better understanding and interpretation of educational phenomena and processes, often without sufficient given attention to the utilization of their findings in school practice. Policy-makers and planners want findings which are useful in making informed decisions and which can be easily and readily utilized. They often neglect and underestimate the value of basic research and tend to think of its findings as "water too far away to fight the fire at hand". Teachers often complain that a great

deal of research is remote from their daily teaching activities and too abstract to apply. The general public is largely unaware of the significance of research in education; many parents are mainly concerned about the academic performance and achievements of their children at school and their chances of getting admitted to a "good school" and subsequently to a decent college or university. This problem of the contradicting concerns of research findings indicates on the one hand the necessity of improving the relevance of research projects to both policy-making and school practice, and on the other hand, the necessity of creating greater awareness among educational practitioners and other actors of the many useful research findings and of strengthening efforts to put results into practice.

Building educational research capacity in developing countries

The contemporary world is characterized in many ways by inequality in the distribution of knowledge as well as in the distribution of wealth, access to health, education and a good environment. And, as long as the international political and economic order is not fundamentally changed, this basic pattern of inequalities will continue for some time into the future (Altbach, 1987). This situation is also true of knowledge distribution in education. A significant way to change this imbalance is to strengthen research capacity as part of the endogenous development process. Encouraging signs have shown that developing countries can and will exercise a growing role in determining the future of the world (Hallak and Fägerlind, 1991).

Based on experiences from China and from my own personal experiences in other developing countries, a number of observations emphasizing the existing needs to be overcome and dealt with in the field of educational research are included below.

1. The under-representation of developing countries in the international community of educational research and the underlying causes for this under-representation need to be carefully examined before relevant strategies are be designed and measures taken to change the inequality. Various and complex reasons account for the under-representation of developing countries in educational research. Among them are factors

such as a restrictive sociopolitical climate for doing quality research, inadequate data base and infrastructure, irrelevant theoretical frameworks and methodological designs for research, language barriers in communicating research findings, and, overriding all these hindrances, the lack of financial resources to support proposed studies.

2. New paradigms and patterns of South-South and South-North communication and collaboration in educational research need to be conceptualized and developed. Apart from Unesco program activities, in which there have been increasing interactions among educators from developing member states, collaborative studies and other joint efforts in educational research among developing countries have been rare. In view of this situation, the dominant representation of developing countries at this seminar sponsored by IIEP and IIE, which will prove in many ways an important event for educational research communities in the developing world, is itself an encouraging sign of efforts in developing more effective patterns of South-South collaboration.

It is important to note that the strengthened South-South collaboration does not and should not mean the weakening or exclusion of South-North cooperation. On the contrary, South-North cooperation is most significant and even essential to the success of South-South joint efforts. It is more so at the present time when the whole developing world is greatly limited in resources available and in expertise and capacity to develop and manage the resources. Centers of excellence in educational research, could very well act as a strong mechanism to pull research efforts together within the developing countries and to help address major issues of common concern.

3. Networking of major research institutions and organizations in and for developing countries needs to be promoted as an effective strategy to strengthen research capacity in the developing world. It is true that regional networks in the field of education have existed in Asia, with the Asian Program of Educational Innovations for Development (APEID) taking the lead in the 1970s. However, there have not been organized efforts to network educational research institutions. Such networking should be based on principles of equality, joint design, and mutual benefits. Among others, some of the tasks and responsibilities of such networks could include: (a) organizing regional and international

gatherings on a regular basis to address common themes; (b) undertake joint research in areas of major concern to participating countries; and (c) provide and facilitate an exchange of information on research projects and research results through existing or new mechanisms, including the creation of new journals or book series specially designed and targeted for research on education and development in developing countries.

4. Closer collaboration and coordination needs to be facilitated between the educational research community and government policy-makers, businesses, industries and other non-educational institutions.

5. The significance of educational research needs to be recognized and made known to the public as well as to policy-makers in light of its interrelation with the socioeconomic, political and cultural dimensions of national development. The vicious cycle of poverty, disease and illiteracy, the relation of economic underdevelopment to educational underdevelopment, the negative correlation of population growth to educational level, and environmental degradation and human ignorance or disregard for the consequences of pollution all indicate the necessity to view education from holistic perspectives.

6. Systematic data needs to be collected, processed, disseminated and effectively utilized, and national and regional networks of information need to be established. In this regard several issues merit attention. One is the standardization of statistical data categorization; a second is the full use of existing information networks and mechanisms at national and international levels.

7. Theoretical frameworks and methodologies of educational research need to be improved according to national contexts. Theories originating from the West need to be critically examined in the national and local contexts of developing countries and adapted to their conditions. There should be greater efforts made to sophisticate research methodologies for greater validity and reliability of research work.

8. An integral system of research, training, and information dissemination needs to be developed.

9. Research priority fields need to be determined in accordance with national development goals and priorities and in light of availability of human, material and financial resources.

While the needs pointed out in this final section are only suggestive, they indicate that much needs to be done. An international commission for establishing educational research priorities for developing countries could be a most relevant mechanism for strengthening research capacity building in developing nations. Maintaining dominant representation of developing countries in the Commission will be most conducive to a new pattern of foreign aid programs and South-South and South-North cooperation in educational research.

References

Altbach, P.G. 1987. *The Knowledge Context*, Albany: State University of New York Press.

CAE 1990. *Chinese Association of Education: 1979-1989*, Chinese Association of Education (CAE) Secretariat Beijing: The People's Education Press.

Hallak, J. and Fägerlind, I. 1991. "Educational Research in Developing Countries: A Background Paper". Paper prepared for the seminar on "Educational Research Priorities in Developing Countries", held in Stockholm, September 12-14, 1991.

SEC 1990. *The Development of Education in China: 1988-1990*, Beijing: State Education Commission (SEC) Publications.

Unesco 1983. *Medium-Term Plan*, Paris: Unesco Secretariat.

Wu, W. 1986. "Transformation and Educational Research in Educational Reforms", *Educational Research*. National Institute for Educational Studies (NIES) No. 2.

Challenging the North-South Paradigm: Educational Research in East Asia

Cheng Kai-ming [1]

The title of this seminar stresses "educational research in developing countries". There are tacit assumptions under this title that (a) educational research can be classified by the nature of the country in which the research is conducted, and classification is possible at least between developing and developed countries, (b) educational research in developing countries is necessarily "developing" in terms of resources and expertise. In other words, there is an identifiable distinction between educational research in the North and that in the South.

This contribution attempts to delineate the state-of-the-art of educational research in East Asian communities (the use of the term "community" is deliberate to avoid sensitive issues about Taiwan and Hong Kong) and argues that the North-South classification fails to accommodate educational research in this region.

Educational research in five East Asian communities

The five East Asian communities under consideration are China (the Peoples' Republic of China), Hong Kong, Japan, South Korea and Taiwan. They constitute perhaps the only group which is active in the international scene otherwise but not in the field of educational research.

China possesses perhaps the world's largest teams of educational researchers. As can be seen from the case of China (Zhou, 1991), there is the 400-member China National Institute of Educational Studies playing

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a central role among over 5,400 researchers in other local or university institutes of educational research. There are numerous projects going on, covering almost all areas of concern, producing massive reports every year.

However, there are a number of characteristics which may have rendered China a rather odd element in the international community of educational research. First, a large proportion of research pieces in China are informative in nature. Particularly when the research is favored by the policy agenda, it often takes the form of something between an experiment and action research, such that the researcher takes an intervening role attempting to arrive at some desired product at the end of the research (e.g. the ongoing research about rural education in the context of comprehensive rural development and the recent projects on moral education). Second, there are also a large number of research works, particularly those carried out as post-graduate studies, which have little practical value (e.g., biography of a 14th century English educator) or which try to draw simple conclusions on a well-discussed and complex matter (e.g. the relations between education and national development). Third, in recent years, a large number of research pieces have adopted the quantitative mode, but few of them deviate from the linear causality model which is often questionable by international standards. Fourth, most attention is paid to applied research of immediate policy implications and little is done on basic research. Fifth, which is related, much more attention is paid to the output of research than what is paid to methodology, rendering such research hardly acceptable in the international scene.

Hong Kong is perhaps the most westernized community among the five and all its educational researchers are trained either overseas in Western institutions or locally along the Western tradition. There is the Hong Kong Educational Research Association established along the American AERA (American Educational Research Association) model which is virtually a territory-wide network for educational research. In the Association's annual meeting, there can be as many as 400 papers presented, representing all kinds of research occurring during the year. This is by no means a small number when one takes into consideration the small population of six million inhabitants.

However, what is happening in Hong Kong is perhaps just the opposite to that in China. Most of the research projects are of purely

academic interest and significance and few of them are meant to influence policy-making. The research pieces are usually done by practitioners as part-time post-graduate students. They often enjoy high methodological rigor (although often in the hypothesis-testing tradition), but dissemination is confined to the academic community. Many of them are never published. There are only three periodicals, of very limited circulation, which carry local research articles. More researchers opt to publish their papers in overseas periodicals.

Japan, despite its advancement in national development, is seldom well-known for its educational research. The National Institute for Educational Research (NIER) in Japan was established in 1949, but has been active in the international scene only since the 1980s. The NIER coordinates a National Federation of Educational Research Institutes which comprises 258 prefecture, municipal and private centers of educational research.

There seems to be a dual development in Japan's trend of educational research. On the one hand there is a cautious though significant effort of conducting research in English (mostly done by the NIER in its Research Bulletins). Such reports, despite their smaller number, are meant to withstand international scrutiny. On the other hand, there are a large quantity of educational studies which follow a Japanese tradition very much similar to the Chinese case in being normative in nature and vague in rigor. Many of them are widely published and disseminated among Japanese educators, but are seldom known to researchers elsewhere.

South Korea has recently been known for its educational research due to the endeavors of the Korean Educational Development Institute (KEDI). The KEDI, which was established in 1972, is a comprehensive research institute covering a whole range of educational research activities ranging from high-powered policy research (e.g. *Korean Education 2000*: KEDI, 1985) to curriculum development and production of curriculum materials. The KEDI is a successful attempt to concentrate the nation's resources, in both physical and human terms, and develop a capacity for extensive educational research. The KEDI has recruited a large number of overseas trained researchers and continues sending its members for overseas upgrading, hence making itself a major vehicle for international exchange.

Besides the KEDI, there are other research institutes such as the National Institute of Educational Evaluation and the Korean Institute for Research in Behavioral Sciences which play national coordinating roles.

Educational research in South Korea is perhaps nearest to the Western model, particularly American. Research has a legitimate position in educational policy-making and most of the research projects bear practical implications. There is a tendency that the Western methodology of research is overtaking traditional approaches of research, although the latter still exist among practitioners.

Educational research in Taiwan is perhaps the least visible in the international scene. Educational research is nominally coordinated by the Education Research Committee within the Ministry of Education, but most of the major educational research projects are carried out in the National Taiwan Normal University which is the major teacher training institution as well as a center for education-related research. There is little research which is policy-oriented, but there is a rather strong component of research related to microscopic studies such as learning, moral development and counselling.

The five communities on the international map

The five communities are all comparatively inactive in the international scene. South Korea is perhaps the most active due to its strong international orientation and its western-trained personnel in its research institutions. Hong Kong is known in the international scene only by its individual researchers and is never recognized as a serious entity of educational research. Researchers in China take part in numerous international activities, but little of their work is accepted by the international community. Japan shares the same difficulty of promoting its educational research upon the international stage, although there are even fewer researchers in Japan who "speak the international language" of educational research. Little is known about Taiwan in the realm of educational research, although there is no lack of researchers trained abroad.

If we compare with other parts of the world, East Asia is perhaps the least active in the international community of educational research. Much less active than places such as Africa, Latin America, the Caribbean, South Asia and even recently Southeast Asia. All these other

parts of the world are seen as economically less active than East Asia, but have all recently established their own networks of educational research and become significant contributors to the international community of educational research. What has kept East Asia from becoming as significant in educational research, as it has been in the world's economy?

Language and culture are obvious barriers. Educational research by its own nature involves practitioners. Few of the educational practitioners in these five communities (perhaps with the exception of Hong Kong) are prepared to communicate in an international language. Only a small portion of the international literature is translated and available to educational researchers in these communities, and even more rarely are works of these researchers known to the outside world. In these communities, there is also a cultural tendency to view matters with a holistic and synthetic approach (as is readily identifiable in medical science, management and linguistics), which is incompatible with the analytic conventions in the West. This has hindered educational researchers in their own traditions from participating in international discussions.

The most obvious barrier is perhaps the odd position of these East Asian communities in the North-South paradigm. A great percentage of the research projects in developing countries are outcomes of international assistance. Much of the literature on educational research are contributed by either donors or recipients of international aid in one way or another. The East Asian communities have found themselves very uneasy in this donor-recipient framework. Hong Kong, South Korea and Taiwan are among the Newly Industrialized Economies (NIEs) which do not qualify for international aid, and which are not wealthy enough to become donors of such aid. Hence they are almost totally neglected in this aspect of international cooperation in educational research. Japan has started to play a donor role, but little has been invested in educational research. Ironically, much attention has been paid to Japan's education in the last few years, largely due to the belief that Japan's economic success is attributable to its educational practice; yet, few have shown interest in the works done by Japan's educational researchers. China is a ready recipient and hence it is the most visible in the international scene, but few local researchers are accepted by donor agencies who conduct massive research projects in China. Again, most of these projects are carried out as if the local literature of educational research was non-existent.

Challenging the donor-recipient paradigm

The East Asian communities share the same characteristics and same problems in their educational research, despite their marked differences in economic and political development. On the other hand, culture, of which education is an essential component, has put all these communities into one category.

The North-South paradigm, which is prevalent in the international community of educational researchers, has partitioned the communities into artificial categories such that their commonalities become concealed, and they find themselves nowhere on the North-South map. This hinders the exchange between educational researchers in these communities and their international counterparts and perhaps explains the inactiveness of the region upon the international stage. This also hinders the emergence and study of the particular philosophy and methodology of research which is specific to the culture of the region.

The North-South paradigm assumes the developed-developing dichotomy and regards economic factors as the sole determinant of educational research. However, if educational research is identified as a cultural endeavor, then the developed-developing distinction loses justification and in such a case the donor-recipient paradigm should be rejected. This would mean a re-drawing of the international map taking into consideration parameters other than economic indicators. The result of which may include not only the unearthing of a whole school of educational research, but perhaps also the surfacing of other cultural groups in the context of educational research.

References

KEDI. 1985. *Korean Education 2000.* Seoul: Korean Educational Development Institute (KEDI).

Ministry of Education, Republic of Korea. 1989. "Education in Korea". Seoul.

NIER. 1990. Tokyo: National Institute for Educational Research (NIER).

Zhou, N. 1991. "Educational Research in China: An Overview of the Current Situation". Presented at the seminar on "Educational Research Priorities in Developing Countries", held in Stockholm, September 12-14, 1991.

Educational Research in Latin America: Notes on Trends, Challenges and Needs

Jacques Velloso [1,2]

Education is sometimes associated with theory and in other instances with practice, depending on the standpoint of the observer. More often than not it is linked to both.

The field of sciences of education may be viewed as being a double-faced area of intellectual and political endeavors. It involves generating new knowledge on what is the world of education, that is to say, uncovering what happens in the classroom and in the socioeconomic and political setting to which education belongs. It also involves a critical examination of pedagogical practices carried out in schools and in education processes at large as well as a scrutiny of social policies addressed to the sector, with a view to identify concrete problems to be faced and pathways to their possible solutions. These, of course, again depend on the vantage point of the observer. One of the key vantage points adopted in this paper is that democracy as an universal value is an overriding parameter for pedagogical practices and social policies.

Research in the field of education moves along those two apparently opposing extremes, the production of knowledge on what education is and on what education ought to be. Their opposition is clouded to the extent that knowledge and interest are related one with another, but their opposition is real to the extent that new knowledge implies negating current

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practices; then the inertia of the interests involved in the latter enter into conflict with the former. These features are intrinsic to educational research and generate a permanent tension in its development, as it has been noted by Goergen (1986). A study on educational research, therefore, ideally should deal with these two dimensions of its development.

This text is about educational research in Latin America. Accordingly, it tries to tackle those two intertwined dimensions of education, but it emphasizes the former given its scope and the availability of information. It does not intend to be a substitute for previous state of the art studies conducted in the region or in some of its countries, which have usually relied on primary sources of data. Rather, based on these reviews and on other sources, it intends to present an overview of major past and current trends of approaches to educational studies, to identify main features and changes in the institutional capacity for research in the field and to suggest some of the conceptual challenges and institutional needs in the years ahead.

The paper is divided into three sections. The first section deals with past trends in approaches to educational research in Latin America from the 1960s and 1970s. It initially addresses a review of abstracts covering approximately these two decades and then presents the major characteristics of the conceptual models that tended to dominate during this period. The second section briefly discusses the evolution of prevailing approaches, from the 1980s and up to the trends that seem to be currently emerging. A few illustrative views on these trends are presented and some pieces of evidence are discussed. Next, the section addresses issues related to the institutional capacity to conduct research in the region. It deals with the origins and major features of the current scenario, advances and shortcomings of research efforts carried out in different institutional settings, and the evolution and problems of information and exchange networks.

The final section discusses major conceptual challenges faced by educational research in the years ahead as well as needs to strengthen its institutional capacity. In the initial part of this section some of these challenges are outlined, particularly as they relate to chances of the disenfranchised and the concern with building a democratic order in the region. The second part of the section continues the discussion on challenges, emphasizing and illustrating the need to overcome the

separation between macro and micro approaches to the study of educational phenomena. Finally, this section concludes by addressing relevant improvements required in the institutional setting in order to enhance the capability of educational research to cope with the conceptual challenges it faces. This part covers issues regarding the training of researchers, funding and the relationships between networks, educational research and policy-making.

The challenges outlined in this paper may be viewed as a suggestion of priorities for the future development of educational research in Latin America. To define priorities in this regard is to establish preferred courses of action based on our current assessment of the scenario, expecting that the future assessment to be produced is more likely to overcome limitations presently observed than if alternative paths of inquiry are pursued. This raises the question of whether courses of action have been correctly chosen. An answer to this question obviously can only be found in future developments. But one can be certain that the chances of being right are as predictable as the paths followed by the production of knowledge.

Past trends: Earlier research and conceptual approaches

Reviews of educational research in Latin America often speak of "paradigms". The concept of paradigm is related to that of "normal science", which in Kuhn's terms means research solidly anchored in past scientific achievements, acknowledged by a scientific community as the basis for its further practice for some period of time. A paradigm, as he defines, involves examples of actual scientific practice "including law, theory, application and instrumentation together" that provide "models from which spring particular coherent traditions of scientific research" (Kuhn, 1970:10). Now, to speak of paradigms in educational research in Latin America implies accepting the notion that the development of a normal science of education has crystallized models that guide coherent traditions in the production of knowledge in the field.

It is doubtful that this process has occurred in central or scientifically hegemonic countries but certainly such maturation did not take place in Latin America, as noted by Brunner (1984). Actually, as he puts it,

taking a set of theoretical orientations, schools of thought or even mere fashionable trends and labelling them as "paradigms" may be convenient to draw a relatively well-ordered scenario of educational research in Latin America, but will result in a distorted picture of the profound diversity of approaches that do exist. His criticism of the use of the concept may be viewed as well-founded given Kuhn's definition, although this author himself uses it with different meanings other than his strict definition. Be as it may, I will use the notion of "approach" instead of that of a paradigm[1] and will attempt to identify trends or converging perspectives within the relative diversity of educational thinking in the region.

Some features of past trends

As educational research and communication networks among professionals progressed in Latin America, reviews of publications in the field evolved to embrace increasing portions of the studies produced. During the 1980s several reviews came to light, attempting to identify trends and changes in the field. A state-of-the-art study, using as a source the *Handbook of Latin American Studies*, indicated that since the late thirties until 1981 publications emphasizing sociological aspects of education predominated, followed by those addressing its philosophical dimensions. In the 1964 to 1981 period, as compared to the three preceding decades, abstracts of publications focusing on sociology and economics of education had risen relative to those based on philosophy and history (Egginton, 1983; Egginton and Koppel, 1983).

The study also indicated a very wide coverage of topics. Abstracts dealt with or touched upon every conceivable topic in the field of education. It also suggested a marked increase in the number of abstracts and, although with an uneven progress, an upgrading of quality standards as revealed by the reviewers' texts in the *Handbook*. The percentage of publications in foreign languages (particularly English and French) went up, thus suggesting closer connections of Latin American researchers with the international community of peers, even though this may be partly due to a growing interest in the region on the part of colleagues from other countries. Shortcomings were also observed and confirmed by other country or regional reviews.

Descriptive approaches, for instance, prevailed in the abstracts classified as research reports, both in the earlier times as well as in the 1960s and 1970s.[2] Country reviews confirm this emphasis on empirical-descriptive studies. They additionally point out a distinctive trait that was not captured by the review of the *Handbook*. Educational research with a theoretical content, although much less frequent, tended to be based on conceptual approaches developed abroad (Gatti, 1983; Zubieta and Sandoval, 1985; Kuenzer, 1986) and often led to reductionist analyses (Cunha, 1978).

From rationality to inequality

State-of-the-art studies for the region also identify the pervasive influence of approaches developed in scientifically hegemonic nations. As noted by Gajardo (1986) these models, typically originating in the U.S. or Europe, though valid for their own sake as attempts to build conceptual frameworks for educational research, have proven to be inadequate to account for the very nature of the sociopolitical and economic conditions in Latin America as well as for their rapidly changing context. This is a characteristic trait of educational research in the region, although it has not been its single distinctive feature, since autochthonous developments have appeared over time.

It has been argued that the evolution of educational research in the region during the 1960s and 1970s cannot be viewed as being organized around one or more approaches. Rather, the development of complex sociopolitical and cultural processes, with their national features, and under marked influence from the scientifically hegemonic nations, have contributed to shape certain issues which were taken to be meaningful to research and by researchers (Brunner, 1984). On the other hand most reviewers typically identify some common features of the approaches that have been used by educational research (Saviani, 1983; Tedesco, 1985; Gajardo, 1986; Garcia-Huidobro, 1988; Latapí, 1990; Garcia-Guadilla, 1991a). Nevertheless, it is useful to point out major trends over time, in spite of some simplification that this implies.[3]

Human resources and the 1960s. During the 1960s, theoretical and methodological approaches that prevailed shared a number of common features. Methods were usually taken to be neutral in regard to theories,

and rationality was taken to allow the prediction of desired changes in educational and socioeconomic settings. Expansion of education was taken to be necessary because it helped individuals to improve the performance of their social roles, it fostered a more egalitarian society and, perhaps more importantly, it increased their productivity, thereby contributing to economic growth. Concerns with human capital models and their correlates, with the allocation of financial and human resources to schooling and the ensuing planning approaches, all loomed large in the literature and in educational policies.

In the field of social sciences, an important local development has been the school of thought developed by the Economic Commission for Latin America (ECLA). This school of thought was greatly influenced by human resources approaches to development and Keynesian theory, especially when seen in the role it gave to the State in the search for macroeconomic equilibrium. This school of thought provided a framework for the production of knowledge in the social sciences and for public policies. Education has not been immune to this relevant new strand of social thought in the region. According to this developmental concept, traditional education was viewed as an obstacle to social change and to economic growth; within the dominant optimist and reformist climate, education was seen to have an important modernizing and democratizing role to play. So much for what may be termed macro-social approaches to educational problems.

As far as research geared toward what happened inside schools and classrooms is concerned, what may be called micro approaches to educational problems, there is less evidence collected by reviewers. The scattered evidence available suggests, in addition to their relatively smaller diffusion in the literature, the dominance of approaches centered on cognitive performance, springing out from psychological models of behavior (for instance, Skinnerian models have had considerable influence in some quarters). It also suggests a rather firm belief in techno-rational solutions for the problems studied, a clear detachment from wider social concerns and an emphasis on issues of teacher training and new teaching methods.

Prevailing approaches have addressed macro dimensions of education, i.e., those that pertain to the relationships between school and the socioeconomic setting, seldom paying attention to what happens inside

classrooms. On the other hand, micro studies concentrated on students, teachers and learning issues and were pretty much encapsulated within their own perspectives. In short, a gap between macro and micro approaches to educational phenomena was consistently being built by the research conducted in the 1960s.

Reproductionism, local developments and the 1970s. The 1970s witnessed the end of an expansionist cycle of development and the reformist optimism. The human resource approach to education became the target of sharp criticism. Economic recession defied the imagined effects of previous investments in training and empirical research challenged its theoretical predictions. Social demands and political contexts turned down the presumed effectiveness of the technical rationality underlying educational plans in Latin America as well as abroad.

During this period, social structures in the region were undergoing significant changes. A number of democratic regimes were facing a severe crisis, social conflicts were gradually spreading and authoritarianism was mounting, often accompanied by massive unemployment. A marked expansion of social benefits – including the supply of schooling – had reached and was reaching ever larger segments of the population, but this was accompanied by an equally important and fast generation of new inequalities. In some countries, like in Brazil and Chile, this new scenario brought about some systematic research efforts addressed to the relationships between political regimes and education. These typically involved attempts to explain changes in educational systems as they related to macro-social changes imposed by authoritarian regimes, under the ideology of national security and neo-liberal economic models.

Actually, the heavy influence of macro-social approaches seems to have been the keynote of educational research in the 1970s within the region. In spite of the limitations of the research of that time, some of which will be mentioned below, a substantial accumulation of knowledge has occurred, particularly in regard to the relationships between school and society. Studies on the inner workings of schools and classrooms received relatively little attention. During this period the gap between macro and micro approaches to educational phenomena increased substantially.

Under the influence of models originating in scientifically hegemonic nations, major concerns had to do with the selection,

distribution and legitimation of knowledge as a response to the interests of different social classes. In very broad strokes this involved, for instance, the study of how knowledge is socially selected and organized; what is the role of schools in the structure and dynamics of the distribution of knowledge across social classes and groups; how schools contribute to replicate the hierarchy of capitalist production and to legitimate social differences in performance which are attributed to individual merit. In parallel strands, it also involved the analysis of the role performed by teachers in this regard, attempts to uncover the hidden curriculum of schools and the ways and means whereby certain socio-linguistic codes, typically of the privileged strata and groups, gain legitimacy in communications processes.

Reproductionist overtones usually prevailed in the development of these strands of thought in Latin America or in research conducted under their influence. Schools and educational practices were usually seen as a tool to reproduce the inequality and domination relationships that are produced by the economic, political and social systems to which they belonged. In spite of the shortcomings inherent to this perspective, it had the undeniable merit of uncovering educational practices and ideologies that previous approaches had not been able to identify.

The 1970s have been sometimes characterized as a period of skepticism in regard to educational research. But it was also a creative period in Latin American social and educational thinking. The generation of models alternative to those developed abroad exerted substantial influence on the educational thought in the region and occasionally elsewhere. Illich's deschooling society and Freire's pedagogy of the oppressed perhaps are among the most widely known innovations. The so-called "dependency theory", actually a conceptual and methodological tool for the study of concrete situations of dependence,[4] similarly born in Latin America, also had some impact on the educational field, however, its diffusion was much larger in the social sciences where it had been generated. Moreover, a number of approaches originated in a re-creation of those developed in scientifically hegemonic nations. A case in point was the adaptation of anthropological and historical methods, leading to qualitative ethnographic projects, micro-historical research, qualitative evaluation endeavors and to the micro-school observation techniques.

As far as approaches to learning are concerned, research made at that time often reversed the predominance of cognitive development or, alternatively, incorporated an interest in the affective domain. This tended to replace previous techno-rational models and frequently was cast in a sociopolitical perspective. Along with this perspective, educational thinking of that time often showed an increasing concern with the participation of the different actors of the learning process in the definition of the goals and patterns of educational activities, from the school to other decision-making levels.

By the late 1980s the emergence of action research was another distinctive feature of the trends that are being discussed. The origins of action research are related to those participative concerns and to a growing perception, within some academic quarters and social sectors, that education did have a role to play in changing society. It is also connected to the political climate of authoritarian regimes. While in these regimes the participation of citizens in the polity at large has been suppressed, it could be done in micro settings as in the popular education movements in the *favelas*, *villa miserias* or peasant villages. The initial role played by the Catholic Church in harboring those chased by military regimes and in attempting to approach the poor contributed to the same effect. Action research in Latin America did not simply replicate the Anglo-Saxon pattern of "action research" nor could it be merely reduced to a new kind of political activism. As it has been defined (Brunner, 1984:28), this approach refers to "projects of communicative action that are geared both to the generation and transmission of knowledge and simultaneously to creating new collective learning situations in which the disenfranchised can gain access to such knowledge". As it is argued, these pursuits potentially have a central relevance in expanding and consolidating the civil society, a precondition for building democracy in our countries, especially in those that have experienced an authoritarian rule.

Current approaches and institutional capacity

Theoretical approaches and research capacity typical of the 1970s underwent significant changes as the 1980s began. This was influenced by approaches that began to spread in scientifically hegemonic nations,

combined with some autonomous developments. In most studies of this time, school was gradually abandoning its role as a relentless means of reproduction of inequality and domination. Within the majority of the countries of the region, the initial stages of setting up research centers were complete. Training researchers abroad was still a relevant instrument to consolidate research capacity, yet the training of researchers was also being done in graduate programs in national centers. This new context, while it represented a large step ahead, presented new problems.

Towards a renewal of approaches

During the 1980s education retained its central role in access to status and power. At the same time, it was progressively acknowledged to perform varied and complex tasks, having widely diverse influences on social change and in the conservation of social order.

Views on trends. As educational research evolved in the 1980s, the notion that theoretical approaches needed to be revamped was gaining consensus. The much discussed crisis of approaches meant that limitations of available theoretical constructs were not allowing a more in-depth understanding of the educational reality in Latin America. Intellectual efforts to overcome these limitations have been noticeable. For some, the early 1980s were already witnessing the development of models in which an emphasis was being placed in the potential of education for social change. Researchers were be turning their attention to the inner workings of schools and educational systems. Under these new approaches, education was taken to possess an important potential for political change in favor of the disenfranchised; therefore, it could have a relevant contribution toward democracy (Mello, 1985). As a matter of fact, some progress in this direction was being made which was most promising, but these trends were still not well developed nor well disseminated among researchers.

In somewhat similar vein, it has been argued that new approaches being build by educational research in the late 1980s showed a major concern with the quality of education at all levels of schooling and had managed to overcome misconceptions underlying previous optimist or skeptical perspectives (Garcia-Huidobro, 1988). School was no longer seen as a privileged trail to economic growth, to social mobility and to

defeating poverty, nor as a relentless means of reproducing inequality and domination. Rather, it was viewed as an instrument that historically has been important to popular sectors, i.e., the poor. New approaches being built also moved away from the dominance of macro perspectives to the educational phenomena. They were attempting to penetrate into the black box of the inner workings of the school in order to understand its day by day operation as it relates to each and every child as well as to society and culture at large. This meant that the gap between macro and micro perspectives was being bridged or was about to be bridged.

Closely connected with the previous perception, it has also been argued that nearing the turn of the decade a new historical-critical approach was emerging (Gutierrez, 1988). One of its keynote features was the concern with the majority of the social groups, i.e., those that have been systematically excluded from citizenship and from the benefits of development. According to this perception, the new approach avoided previous optimism or skepticism that arose due to a lack of historical grounding, and it avoided ideological perspectives that overshadowed adequate analyses. This in turn led to a better understanding of the real problems and their possible solutions. Current trends in educational research have been pursuing varied routes as far as objects and methods are concerned: they include both action research as well as classic experimental studies; formal schooling and nonformal education; concerns with popular education but also with what happens in the classroom; macro and micro socio-educational problems.

Some evidence on current trends. Trends along these new paths are promising, if they are actually observable. They suggest that appropriate answers are being provided in order to overcome the shortcomings often observed in the past, such as the relative prevalence of empirical-descriptive studies and of conceptual frameworks that did not take in due account the socio-educational reality of the region. In fact, theories developed abroad are being subjected to closer scrutiny and there is a more cautious search for their possible contributions to understanding Latin American problems and issues, in spite of the influence that sometimes still is exerted by fashionable approaches (Goergen, 1986).

A recent survey of educational research in Latin America suggests that some of the trends along these new paths are actually observable in what is published in the region, but others are not. Nonetheless, this

survey which appears to be the most complete to date does not allow one to conclude that these trends already dominate the scene. This study, conducted by Garcia-Huidobro, Ochoa and Tellez (1989), made a content analysis of a sample of 1,000 documents summarized in the *Resumenes Analíticos de Educación* (RAE), published between 1978 and 1988 by the Latin American Network of Documentation and Information (REDUC), from the Center for Educational Research and Development (CIDE).[5] Coverage of RAE may be illustrated by the number of abstracts published, which include over 15,000 since its inception in 1972. On the other hand, as the authors acknowledge, since RAE is published in Chile and since CIDE is a private organization, documents published in this country and originating from private centers may be over represented.[6]

Their results show that, from a disciplinary standpoint, publications in the region rely heavily on sociology of education (more than 40% of the studies), followed by psychology and philosophy of education (11% each) and, next, by history and economics of education (about 9% each). The shares of each of the disciplines varied during the period studied. Taking the extremes as a reference, sociology fell a little, psychology retained its share, philosophy presented a large increase, history almost doubled its representation, and economics fell sharply. All in all, the results revealed an increased interest of researchers in the historical and philosophical dimensions of education, in addition to the already known reduction of importance of the economics of education.

Results were also broken down into three groups of countries, classified by their level of relative development.[7] They reveal that the percentage of publications from relatively wealthier countries is large, as expected (82%), but also that their share grew substantially over time (if Chile is excluded due to possible over-representation of its publications, the share still remains high, 59%). In other words, differences among countries in institutional capacity and in research production increased; countries with larger educational problems in view of their relative level of development seemingly have fewer chances of studying them.

Looking at the topics covered by educational research over time, clear signs of change are observed. There is a growing interest in the relationships between education and society and with teachers. The share of the former topic rose from about one quarter of the abstracts reviewed to more than 40 percent. Interest with teachers doubled but still remained

a meager 4 percent, which raises concerns since implementation of changes in education obviously have to rely heavily on teachers. Topics related to students and to the context of education remained constant; those related to institutional aspects of education showed a sharp decrease and those associated with learning/teaching aspects (e.g. curriculum and teaching methods) fell a little. The small share of this latter topic also raises concerns similar to those that apply to the low interests in teachers.

Another relevant finding is the pervasive attention given to educational problems of the poor segments. Explicit attention given to the relationship between education and poverty was found in more than a third of the documents. Moreover, topics that refer to critical problems of the education of the poor, like literacy and basic education, have been a growing concern of researchers over time.

An equally important finding, but in the opposite direction, as pointed out by Garcia-Huidobro, Ochoa and Tellez (1989:48) is that a number of dimensions that play a central role in the destinies of education are usually ignored. Little attention has been given to "phenomena that are central to modern life, like the impact of mass media on culture and issues pertaining to scientific and technological development and to the economy."

Findings on the breakdown by disciplines, previously discussed, should be complemented by an analysis of the differences found between disciplinary and interdisciplinary approaches. The latter approach prevails in publications from different sources (universities, private centers, governments and international agencies), which is in accordance with the very nature of educational problems. But over time the share of disciplinary approaches gains importance among all sources, especially in private research centers, followed by universities. Disciplinary approaches in these centers rise from about a third to almost half of the total abstracts reviewed in the period studied. As it is suggested by the authors, this may indicate a greater methodological refinement in educational research. In addition, if the disciplinary model may be viewed as closer to academic concerns and the interdisciplinary perspective as being closer to politics and policy-making (in the sense of educational practice and in the sense of decision-making), then universities and private research centers would exhibit a profile with stronger academic traits, as one might expect.

But these findings also allow another interpretation. As it has been mentioned above, new approaches are supposed to get into the inner workings of school and educational systems in order to understand and apprehend their relationships with society at large. This seems to be badly needed for the advance of educational research, especially as it relates to the destinies of the disenfranchised. Moving in this direction requires a qualitative leap in the sense of bridging the gap between opposite macro and micro approaches that have been prevailing. This change presumably is to be done with attempts to integrate apparently different but actually related aspects of socio-educational reality. If this is so, then a growing emphasis on disciplinary perspectives does not seem to indicate that the required qualitative leap is a well diffused trend, in spite of the fact that some of the studies done in the past few years point in this direction.

Lastly, the survey also dealt with the methodological approaches used in the research reports. It revealed that clear cut methodological lines became less well defined over time and that a much wider and richer variety of methods have been coming into use. Thus, to the extent that understanding different objects of study often requires drawing upon diverse methodological perspectives, changes in educational research over time meant a step ahead toward bridging the mentioned gap between micro and macro approaches.

Changes in institutional capacity

The development of science and technology in Latin America since the 1960s has been remarkable. Although there remains an almost abysmal difference between the region and industrialized market economies in this regard, Latin America currently counts on a few dozen of hundreds of graduate programs in a wide range of fields of knowledge.[8] The State plays a major role in fostering and supporting these programs and there are a number of communities of scientists having rather stable connections with their mainstream counterparts at the international level (Brunner, 1987). As far as the field of education is concerned, during the past few decades there have been sharp increases in enrollment in graduate programs and in the number of research centers, with positive effects on research. These advances, however, occurring on a much smaller scale than that previously described, have not always followed along similar

paths and often have started somewhat later. Provided that differences in proportions are duly taken into account, it is fair to say that some of the present conditions for the development of science and technology apply to educational research.

A new scenario and its origins. Current problems of educational research are frequently not those faced when an institutional frameworks were being started almost from scratch. In the 1960s, or for that matter in the 1970s, difficulties in establishing new graduate programs in universities and/or independent research centers dominated. Current research efforts, previously carried out by lonesome individuals, for instance, are being progressively replaced by research teams with a rather continuous production. Networks of exchanges among professionals and diffusion of information among researchers and institutions have been build and are expanding. Dozens of journals have appeared, many of them with editorial boards and a number of them continue to be published with some regularity; in a single decade the number of journals and other periodicals had doubled. Access to information has greatly increased, enhancing the process of knowledge accumulation, and productivity has exhibited a marked growth.

Current challenges are rather those of choosing among strategies of development. It is true that sensible differences persist between those countries that have gone farther in obtaining and providing academic and material conditions for the expansion of educational research and, in some respects, distances have increased over time. But the current bases are altogether different than they were a few decades ago. One example of this is that several countries have set up national funds and agencies to foster research in all fields of knowledge, including education (e.g., Argentina, Brazil, Chile, Columbia, Mexico and Venezuela). Typically, funds are granted to research projects according to their merit, as a result of a peer review evaluation (Schiefelbein, 1990; Vior, 1990). These funds and agencies have represented a noteworthy contribution to the fostering of new research teams and centers and to consolidating those already established; however, much remains to be done in this regard.

The development of educational research was initially allowed by graduate training abroad in the 1960s and early 1970s and later fostered by strengthening the institutional capacity of research centers. A few of them were established within the government like in Costa Rica, Mexico,

Nicaragua and Peru. But the majority were set up as independent non-profit organizations, as in Argentina and Chile, or in graduate programs in universities, like in Brazil. It is true that in education, unlike the hard sciences, a fraction of active researchers originate from related fields of knowledge (e.g., sociology and anthropology) and/or were made on the spot by means of practice rather than any formal training. This fraction is argued to be substantial by Ibarolla (1988; see also Argenti *et al.*, 1988), but at any rate the relevance of graduate training in national programs and abroad – particularly in education – cannot be understated.

Table 1. Changes in higher education enrollment in Latin America relative to population. 1975 and 1986.

Countries	Enrollment/100,000 Inhabitants			Enrollment/Population aged 20-24		
	1975	1986	Net change (1975=100)	1975	1986	Net change (perc.pts.)
Argentina	2291	2938	128.2	27.2	38.7	11.5
Bolivia	971	1492a	153.7	11.7	19.0b	7.3
Brazil	1009	1048	103.9	10.7	11.3	0.6
Colombia	760	1371	180.4	8.0	13.1	5.1
Costa Rica	1689	2452	145.2	17.5	23.8	6.3
Cuba	886	2554	288.3	11.0	22.5	11.5
Chile	1446	1737	120.1	16.2	15.9a	-0.3
Ecuador	2419	3078a	127.2	26.9	33.1b	6.2
El Salvador	692	1511	218.4	7.9	14.1	6.2
Guatemala	380	755	198.7	4.3	8.6	4.3
Honduras	386	836a	216.6	4.6	9.5a	4.9
Mexico	908	1503	165.5	10.6	15.7	5.1
Nicaragua	759	791	104.2	8.3	8.7	0.4
Panama	1504	1787	118.8	17.3	25.9a	8.6
Paraguay	683	958a	140.3	7.0	9.7b	2.7
Peru	1290	2339	181.3	14.6	24.6	10.0
Uruguay	1153	3357	291.2	16.0	41.6	25.6
Venezuela	1686	2485	147.4	18.1	26.4a	8.3
Total/Average	20912	32992	157.8	13.2	20.1	6.9

Source: Lopez (1991:Table 2).

Notes: a. 1984; b. 1987.

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The expansion of graduate training was facilitated by the fast growth of higher education enrollment in the region during the past few decades. The number of students jumped from a meager share of less than three percent of the age group (18 to 24) in the early 1950s to the current 14 percent. This is quite a change for the region but still is considerably behind the high shares exhibited by industrial economies, for example 56 percent in the U.S., 37 percent in Sweden and 30 percent in Japan (Lopez, 1991; additional data by country are provided in Tables 1 and 2).

Table 2. Enrollment in higher education in Latin America. Selected types, circa 1987. [a]

Countries	Total (N)	University (%)	Non-Univ. (%)	Education & Teach.Train(%)	Other Areas%
Argentina	902882 e	78.3	21.7	1.5	98.5
Bolivia	95052 e	89.6	10.4	1.0	99.0
Brazil	1503560 g	51.2	48.8	14.9	85.1
Colombia	439530 f	87.1	12.9	19.3	80.7
Costa Rica	71675 f,g	91.1	8.9	8.7	91.3
Cuba	256619 d	-	-	48.1	51.9
Chile	186318 c	59.5	40.5	23.2	76.8
Ecuador	195588 g	95.3	4.7	28.2	71.8
El Salvador	74024 e	-	-	16.4	83.6
Guatemala	67715 c,k	-	-	-	-
Honduras	36640 f	87.9	12.1	17.0	83.0
Mexico	1270119 h	71.9	28.1	11.2	88.8
Nicaragua	29001 d	84.2	15.8	14.5	85.5
Panama	54928 f	98.9	1.1	10.7	89.3
Paraguay	30431 b	-	-	-	-
Peru	136782 c	78.8	21.2	14.2	85.8
Uruguay	61450 g,k	-	-	2.5	97.5
Venezuela	467372 f	69.6	30.4	18.6	81.4
Total/Average	6179686	67.3	27.1	14.1	85.9

Source: Lopez (1991:Tables 3 and 4).

Notes: a.Data refer to last year available. See notes "b" to "h". b.1983. c.1984. d.1985. e.1986. f.1987. g.1988. h.1989. i.Percentages based on enrollment in education in 1986. j.Enrollment in public universities. k.Enrollment in universities.

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Reliable and comparable data on graduate programs for the region are not available in general nor for the education field. But some illustrations may be given with figures from Brazil and Mexico, provided that one bears in mind the large proportion of graduate enrollment shared by these two countries in the Latin America scenario. In Mexico, by 1989, about 17,000 students were enrolled in graduate programs of which slightly more than half were in M.A. level, less than two percent in doctoral programs and the remaining in other sorts of programs (Lopez, 1991). In Brazil, the Mexican enrollment figure had been reached by the mid-1970s in M.A. and PhD. programs alone (Cordova *et al.*, 1986), since the country had been investing relatively heavier in national programs than in training abroad as compared to Mexico. As a result, there are almost 400 doctoral programs in all fields of knowledge in Brazil, of which doctoral programs in education correspond to about two percent.

At this juncture one may inquire about the size of the community of researchers in education in Latin America. Since no figures are available, I have attempted to obtain a very crude indicator of the number of qualified or experienced researchers in the area, which suggests that they might be well above 8,000. This is obtained using data on higher education enrollment in the region (see Table 2 above), preliminary data on educational researchers in Brazil and data on publications as yardsticks, trying to account for the large number of researchers in independent centers and making a few heroic assumptions; among these, that the rather continuous and systematic efforts to expand graduate programs and to train researchers abroad, as occurred in Brazil, also happened in other countries of the region.[9] While sustained efforts to foster graduate education have been carried out in some other countries like Colombia, Mexico and Venezuela, no clear strategy to that effect has been adopted in Argentina (Oteiza, 1991) or in Chile, where success attained in developing educational research seems to have relied largely on scattered instead of concerted endeavors (Donoso, 1987). These circumstances tend to bias upward the crude estimates obtained which, on the other hand, are initially based on a quite restricted set of researchers with a doctor's degree, thus biasing it downward. It is acknowledged that a number of other biases in both directions could be identified and the assumption made could be easily criticized. But the figure intends to simply suggest

an approximate number given the lack of any other known relevant empirical data.

Research in governmental agencies. Initial efforts to train students abroad, to set up research centers, then to strengthen their academic and financial autonomy are past stages of institution building for most countries in the region. In some countries these efforts were deeply affected by the cycle of authoritarian regimes, as it occurred in Argentina, Chile and Uruguay. Political repression against universities often dismantled established research teams. While this seriously affected the progress of knowledge, a number of independent research centers in the region were established in attempts made by researchers evicted from university faculties to continue their work.[10] Additionally, during the authoritarian periods in Argentina, human and financial resources were shifted from public universities to other governmental research agencies (Cano, 1985), thereby reducing the role played by the former in educational research development.[11] In Argentina, unlike others such as Chile, independent centers did not prosper as much.

In spite of these obstacles, it is fair to say that presently an autonomous institution building has, to a certain extent, been achieved in the region. Productivity has been increasing over time with gains in quality. Prospects are that these trends will continue if adequate conditions are met. However, this is not the case of government centers.

Research conducted in government agencies did not succeed. Its heyday in the 1960s and partly during the 1970s was mostly an outgrowth of the impetus of educational planning but it gradually lost its vigor, yielding to independent research centers or to graduate programs in universities. Mexico was, in some respects, an exception. Its educational research activities within the government was initiated with a program in CONACYT, in which criteria to select projects were rather independent from government policies. As this program was being phased out, and while a number of other educational research agencies were being established within the State, research efforts conducted outside the government increasingly had to face competition for resources with all other fields of knowledge. In the early 1980s more than half of the research reports on education in the country were produced at the government level or as an outcome of their demands. However, most of

those government research agencies were short lived, reducing available sources of financial and human resources for research (Vielle, 1985).

In countries like Columbia (ICOLPE), Chile (CPEIP), Peru (INIDE) and Venezuela (EDUPLAN) research centers were set up in Ministries of Education during the past two decades and in Brazil (INEP) earlier in the thirties, but all of them are relatively unproductive; little information is available on the various educational initiatives that were carried out by other governments in the region (Cariola, 1991). Unable to pay competitive wages for qualified personnel, government research agencies tend to rely on consultants or act in conjunction with universities.[12] In short, the record of these agencies does not suggest a promising path for the conduction of research in the years ahead.

Research in universities. An opposite course was followed by graduate programs in universities. In countries where these have reached considerable development (e.g., Brazil, Mexico and Venezuela), an important fraction of research on education is conducted in universities. Their effectiveness sometimes is limited by bureaucratic obstacles. In other instances, as in the Brazilian case, graduate programs often turned out to be organized in rather small units, enjoying improved institutional arrangements and operational conditions relative to the large and heavy undergraduate teaching structure of universities. This contributed to remarkable advances in research done in universities, although there are risks of reversing these privileged conditions (Cunha, 1989).

Local training of researchers in universities is still somewhat limited, in spite of the substantial progress that has been achieved. It is mostly a byproduct of dominant teaching concerns since the vast majority of graduate programs are at the M.A. and not at the doctoral level. As indicated by country reports, this is the case of Brazil and Mexico, for instance, in which graduate education has reached considerable relative development (Favero and Cruz, 1990; Vielle, 1985; Warde, 1989); in other countries where such development did not occur limitations are larger. Another relevant dimension of research development in graduate programs is the stability and productivity of research teams. According to country reports, it seems that faculty research is typically carried out by individuals (Gatti, 1986), sometimes with a few assistants, although in a number of centers a critical mass of qualified faculty members have

generated small research teams as well as a continuous and well established academic production.

Funding comes from varied sources, ranging from the State to donor agencies; university budgets tend to represent a small share of the resources allocated to research projects. One problem faced by these research centers, as far as government resources are concerned, lies in the instability of funding deriving from constant changes in State policies and sometimes also in the one-year time span covered by grants. Continuity is frequently vulnerable to changes in the sociopolitical and economic context or to policies that are detrimental to the stability of research teams. The steady decrease over time in real salaries of the faculty of universities, for instance, has been exerting a damaging effect on the continuity of research teams since affected faculty members tend to look for jobs elsewhere.[13]

Research in independent centers. Independent research centers, not directly connected with universities, typically non-profit institutions fitting in the category of non-governmental organizations, have prospered since the 1960s in Latin America. These centers, currently harboring a significant portion of educational researchers in the region, are responsible for a large fraction of the reports produced in the region. Many of these non-governmental organizations generated stable interdisciplinary research teams and have maintained a regular flux of academic production. They were all established before the last decade, as reported by Cariola (1991). In the early 1960s the CEE (Mexico) was established, followed by the Carlos Chagas Foundation (Brazil), CIDE and PIIE (Chile), CIE and DIIPME (Argentina) and CPES (Paraguay); next came CINDEG (Guatemala), CERPE (Venezuela), CEDEN and SER (Colombia), CITPE and INSOTEC (Ecuador), CEBIAE (Bolivia), DESCO (Peru) and CIEP (Uruguay).

Financial support for these centers typically comes from foreign donors, particularly from foundations and international organizations. The Carlos Chagas Foundation in Brazil is unique among its counterparts in that it is the only institution counting on a rather substantial and stable source of funding. For all others, funding remains a major issue.

Development of educational research associated with increased scarcity of available resources in the 1980s brought about a highly competitive climate in the search for funds. This had positive effects

since it tended to enhance academic standards, but the heavy dependency on donor agencies, which usually have established priorities of defined research topics eligible for funding[14] acted in the opposite direction. Progress of knowledge and theory building are affected because certain topics are sometimes abandoned before adequate levels of accumulation and diffusion of results have been reached. In short, the stability of academic production is highly vulnerable to changes in the sociopolitical and economic context and also to alterations in research priorities set by financing agencies.

Information and exchange networks. Advances in educational research development since the 1970s were associated with the growth of networks of exchange and of information. The former, including congresses, seminars and other sorts of academic and professional meetings in education, have been exhibiting upward trends. In Latin America their number as well as the diversity of the topics covered have increased; educational research itself has been the subject of a number of meetings. Attendance has grown within the region and in international meetings held in scientifically hegemonic nations. Several kinds of professional meetings in the region have been taking place periodically. Needless to say, their relevance for the advance of knowledge is evident, both through the discussions during the meetings as well as through the informal network of exchange which follows as a byproduct. They also contribute to enhance policy-making capacity, to the extent that this depends on a closer communication between researchers and the State in order to help the design of public policies adequately oriented towards enhancing effectiveness in schools and democracy in educational systems and in society at large. In spite of those promising trends, exchange networks have been affected by the political and economic circumstances of the countries involved due to changes in the availability of funds.

To a certain extent, the rise of professional associations in education in Latin America are a product of and have contributed to the gradual consolidation of research efforts in the field. In some instances they have greatly enhanced the exchange of information among researchers and institutions. The National Association for Research and Graduate Studies in Education (ANPEd), in Brazil, is a case in point. Founded in the late 1970s, it initially involved institutions (graduate programs) and later catered to individual researchers as well. Its annual meetings have been

playing quite a relevant role in the local discussions of theoretical and methodological approaches to educational research (Gatti, 1983). Its day by day activities are developed by working groups that cater to the diverse interests of the researchers involved. ANPEd's development was facilitated by the concentration of Brazilian researchers in graduate programs in universities as well as by the financial support to meetings granted by the government, although over time it has maintained its independence *vis-à-vis* the State.[15]

Currently there are seven information networks in education: the above mentioned REDUC, that covers all sub-fields of education; CRESALC/UNESCO, oriented toward higher education; CINTERFOR, concerned with vocational education; the three networks of OREALC/ UNESCO, REPLAD (planning and administration), REDALF (literacy) and PICPIMCE (literacy); the Council for Adult Education in Latin America (CEAAL). They have been fulfilling a relevant role in the information diffusion process, by "narrowing the distance between sources that generate knowledge and potential users" (Schiefelbein, 1972:20).

Among these networks, perhaps REDUC should be singled out due to its coverage of the field. Since 1972 it has been collecting and disseminating results of educational research. It currently counts on a network of 27 centers in the region, has a stock of more than 15,000 documents, and processes approximately 2,000 new documents every year. Additionally, REDUC has edited 450 different publications over the past ten years alone, but its success in producing documents has not been matched by its capacity to distribute them (Cariola, 1991).

Exchange and information networks currently reach a substantial number of researchers and institutions within the region as well as some of those from scientifically hegemonic nations. Nevertheless, research centers in most countries of the region suffer from a considerable degree of social isolation within national contexts; in these countries public opinion seldom is shaped by the products of educational research, which often do not reach their potential beneficiaries. This certainly has to do with technical questions related to the effectiveness of networks but also has sociopolitical dimensions. This issue will be taken up in the following section.

Major challenges and needs

Challenges faced by educational research in the years ahead depend both on changes taking place in the wider sociopolitical and economic settings and within the sector in which it develops. The past few years in Latin America have been characterized by significant changes in modernization strategies of capitalism oriented toward a development model open to the international market (Garcia-Huidobro, 1988). Strategies pursued, ranging from neo-liberal to authoritarian patterns, typically maintained the exclusion of large segments of the population from the benefits of development and led to increases in the concentration of income and wealth. In addition, the huge foreign debt has produced remarkable constraints on the economies of the region; poverty and unemployment have increased, particularly among the poor.

In the scenario for the coming years, current trends suggest that scarcity may be expected to be its main feature (Tedesco, 1989). In the medium and short run restrictions on public budgets are likely to prevail, even if favorable conditions are obtained in negotiations of the foreign debt. This means that competition for resources among the various social groups and different sectors of activities are likely to become sharper, thus affecting the availability of funds for education and, likewise, for educational research. Moreover, while the future of the educational sector is a major concern in industrial market economies, the same does not apply to countries of the region, where the priority to be given to the sector still lacks the necessary consensus. This is the scenario, painted in very broad strokes, against which the challenges posed to educational research in the years ahead should be examined. Since it certainly does not allow much optimism, what is needed to face these challenges gains in relevance.

It has been argued that the international scientific division of labor induces Latin America to carry out research within models produced abroad for several years to come (Brunner, 1984). On the other hand, the region has produced alternative models to mainstream approaches that gave local research a new impulse in the process of enlarging the understanding of its problems. As a matter of fact, current challenges seem to depend upon the ability to adapt theoretical options produced in scientifically hegemonic nations and to build theoretical frameworks that

respond to the specific problems of educational development in the region (Latapí, 1990). As has been suggested by Gajardo (1986), progress along this line requires a number of conditions; from a conceptual standpoint it requires the fostering of interdisciplinary work, the promotion of critical evaluation of diverse approaches, avoidance of preconceived and packaged prescriptions; from an institutional vantage point this calls for the consolidation of an integrated academic community, the assurance of continuity for research teams and institutions and security of their professional concerns, in addition to the guarantee of adequate levels and patterns of funding.

These challenges and needs define priorities in educational research for the years ahead. Facing them will demand substantial efforts on the part of a number of actors. The following paragraphs are devoted to discussing these efforts.

Conceptual challenges

Changes underwent in the educational systems of the region and in the wider sociopolitical and economic setting in the past few decades left a number of unanswered questions by educational research. Challenges ahead will undoubtedly have to attempt to answer to these questions. In some sense, they define conceptual priorities for research and are related to policy-making in and for a better society. A few years ago Tedesco (1985) suggested some lines of inquiry to answer these questions which concern issues like (a) the expansion of education and the marginal groups; (b) science and technology, knowledge and education; (c) social actors, educational processes, learning conditions and the proper approaches to studying them. Today these lines of inquiry still pertain to the framework of the major conceptual challenges to be faced and provide some fruitful paths to be explored.

The extraordinary growth in enrollment at all levels of schooling since the 1960s produced as one of its outcomes a noteworthy increase in coverage from elementary school to college, but it also generated an increase in the inequality of schooling. Nonetheless, compulsory schooling is still a target that has not been attained and, for most of those enrolled in school, access to basic cultural and socio-linguistic codes is not being assured. Marginal groups, or the disenfranchised, remain in fact

excluded from access to tools that are required for citizenship. This difference between formal and actual access is of paramount importance since in modern capitalist societies access to knowledge has been and will increasingly be a most important means for domination and social control – or, for that matter, for freedom and democracy. These phenomena and their varied relationships with the social setting have not been fully accounted for by educational research, although significant advances have been obtained in this regard. Thus, the main issue here is how a nominal access to schooling can be turned into real access to the tools for citizenship. Certainly this is above all a political issue, bearing on the construction of a democratic order in the region. But from the pedagogical standpoint "the question to be answered by educational research is how children coming from the marginal groups can be taught" (Tedesco, 1985:518). Here, as it often happens in the field of the sciences of education, questions asked demand answers that should contain both explanatory and normative propositions.

Difficulties in facing this challenge are compounded by the increasingly pervasive influence of scientific and technological knowledge on the social and economic development of modern societies, and by issues related to its distribution and production. Distribution of relevant knowledge is recognized to be an important tool for legitimizing social power and differentiation. This is why, of course, educational processes lie in an arena in which different social classes and groups struggle for access to knowledge (Saviani, 1983). In Latin America, apparently educational systems have been exhibiting a deterioration in their capacity to distribute socially relevant knowledge. But this decay is mostly concentrated in those segments that cater to marginal groups and this does not seem to occur at random, given that characteristic of educational processes. While this general line of reasoning tends to be substantiated by previous research, there remains a twofold challenge for future inquiries. Researchers will be challenged to give a fuller account of the roles performed by education in the social distribution and production of relevant knowledge, in a context in which science and technology increasingly shape modern societies and their prospects. Secondly, research efforts, relying on its normative branch, are expected to suggest the tasks of education in a setting that still lacks the productive capacity

to generate the kind of knowledge which will define, to a large extent, the avenues of sociopolitical and economic development of the region.

Another challenge has to do with a change in focus of educational research. This has been concentrating on the products of educational systems and policies rather than on their processes. Much knowledge has been gained on what these products are. But findings have often revealed that products have not followed predictions according to prevailing approaches. Moreover, these very approaches indicate that the scenario in which educational processes develop is one of social conflict and struggle, involving varied social actors behaving according to certain strategies. The accumulated knowledge concerning this suggests that new approaches ought to pursue an epistemological turn, searching to deal in depth with these processes, which naturally demands a stronger emphasis on the dynamics of social forces over time, namely on history.

The gap: A challenge and an illustration

All of the above can be seen as mere ingredients to the core turning point that is required from educational research. This turning point consists in overcoming the separation between macro (or macro-social) and micro (or psycho-pedagogical) approaches that have prevailed. In my view, this amounts to pursuing the process of building the sciences of education, that to some extent count upon the contributions of philosophy, history, psychology and the social sciences, as applied to education, but the pursuit should not be reduced to these since the field possesses its own specific character.

Traditional micro or psychological approaches recognize the large diversity that characterize the starting points of children in school. One of the most widely known tenets of these approaches is the relevance of individual paces in learning so that an adequate cognitive achievement be accomplished. But in the real world of education in the region this tenet is little more than a rhetoric piece in the training of teachers. Mass education characterizes the world to which the disenfranchised have normal access, if they manage to get to school. If they do, they remain in the system for only a few years at best. Failure, not success, is the key feature of Latin American elementary education. Now, when it is recognized that effective access to relevant knowledge is surrounded by

social struggle, the psychological approaches to educational phenomena show up their weaknesses. On the other extreme, macro-social approaches are able to suggest some of the effects of this social struggle on educational achievement but are unable to tell how the inner workings of schools are related to them. There is a conceptual bridge to be built between the starting points of the marginal sectors in school and their final destination. This involves both an enlarged understanding of this process as well as constructing learning alternatives for *marginal sectors*, i.e., the *majority of the population* in the region. This bridge, of course, has to be built with a particular concern toward the construction of a democratic, sociopolitical order in Latin America.

What is being discussed amounts to a qualitative leap in the efforts to be made by educational research, namely that of bridging the gap between macro and micro approaches to educational phenomena. In the pursuit of this path the teacher becomes one of the central objects of research, along with the attitudinal, cognitive, ideological and socio-political dimensions that permeate his/her day by day activities in the classroom and school, and in the society at large.

Recent research findings on literacy, repetition and dropout in Brazilian schools, associated with issues related to teachers' attitudes, may help to give a partial illustration of the qualitative leap that is being referred to. Official statistics on repetition and dropout in the initial grades of elementary school indicate that usually they are very high, reaching rates like 35 percent and 10 percent, respectively, or more. A study based on a careful analysis of a large mass of data from national household surveys recently turned down this conventional wisdom (Costa Ribeiro, 1990). It revealed that repetition is much higher than ever recorded and that dropout is quite smaller than official statistics indicate.[16]

Reasons for this apparently lie in how parents from the disenfranchised sectors of society – which in Latin America are the majority of the population – act in the face of consistent repetition of their children in school. It seems that after a child repeats the first grade a few times, their parents move him/her to another school, attempting to avoid the stigma of repetition and hoping that he/she would be promoted. Then, when registering the child they do not report his/her previous educational experience. The teacher would eventually find out about this, but most school records are likely to remain unchanged, reporting the original

information provided by the parents. Thus, it turns out that a large portion of children recorded as dropouts in official statistics actually simply had moved to other schools instead of abandoning the educational system. This means that a significant proportion of first grade children appearing in official statistics as new entrants are in fact repeaters.[17]

Promotion to the second grade usually requires mastering the basic cognitive abilities of reading and writing, that is, basic literacy. Lack of ability to meet these standards entails repetition. Taking into account the characteristics of the literacy process and those of the educational process at large, particularly as they developed in most Brazilian elementary schools, as well as the persistent high rates of repetition, a number of state public systems of education replaced the formal separation between first and second grades with an integrated two-year period of learning. Under this innovation, termed basic cycle for literacy, children would enjoy the opportunity of progressing according to their own pace at least up to their second year in school. Educational practices, however, are proving to be quite different from those intended by the innovation.

A number of recent studies using a micro approach to educational phenomena instead of the macro perspective of the above mentioned research, and employing qualitative rather then quantitative methods, have been inquiring into the organization of classrooms in elementary schools in São Paulo.[18] These studies involve interviewing school principals as well as first and second grade teachers of the public educational system of the city of São Paulo. They are finding out that many schools are establishing student promotion and classification mechanisms that countervail the intended effects of the basic cycle for literacy. Grades are being reinstated although with a different label. Misconceptions of student classification on the basis of presumed abilities as revealed by IQ tests, frequently adopted from almost half a century ago, are being embraced by many of the interviewed principals and teachers, not by means of any standardized tests, but according to their own perceptions. *De facto* first and second grade classrooms are being subdivided into "weak" and "strong" subgroups and children are allocated to them accordingly.

In short, instead of providing the disadvantaged with the improved learning conditions that the basic cycle for literacy was expected to offer, many schools are reinforcing the difficulties already faced by low achievers. Reinstating the first and second grades and classifying or

tracking into groups are practices probably connected with a self-fulfilling prophecy attitude of teachers, as discussed in the now classical study of Rosenthal and Jacobson. Under these circumstances, it is no surprise that repetition rates in the state, as measured by usual standards, have been changing little after the basic cycle for literacy formally began being implemented a few years ago.

These two kinds of studies briefly reviewed here are important *per se* but even more so when they are put together. The former, using macro approaches, survey data and sophisticated statistical techniques, shows that repetition in the country is a more serious phenomenon than it was ever imagined to be. The latter, employing micro approaches, qualitative data and methods, reveals that in the inner workings of many schools, teachers and principals adopt old fashioned pedagogical practices that defeat public policies aimed at the underprivileged and intended to cut down repetition. Results from these studies consist in large steps ahead toward our understanding on how the educational system performs and on how schools and teachers operate. It is likely that the ongoing micro studies will dwell deeper into the roots of teachers' practices. Previous research indicates that practices such as these have to do with training as well as with educational and social experience, but more is needed.

Income distribution in Brazil has been worsening over time since the 1960s and the real minimum wages paid to unqualified workers has been steadily losing its purchasing power. Unemployment has grown among the underprivileged in the past few years. Formal citizenship rights had been enlarged after the new Constitution enacted in 1988 but real citizenship is still restricted to a few. On the other hand, coverage of elementary school has increased, especially in the city of São Paulo, as did the average number of hours per day spent in the classroom. Teacher qualification also went up in São Paulo. Currently it is rare to find someone with a secondary school diploma from the *école normale* but it is not uncommon to find a teacher with some graduate studies or an M.A. degree. Teachers' attitudes, such as those described above, do not seem to reflect these improvements. Rather they may reflect the social experience of those who look at the socioeconomic conditions faced by the disenfranchised and perceive their prospects for improvement as being virtually null. But, educational chances for the underprivileged have improved to a certain extent over time; a trend which would not fit with

most of the changes in the socioeconomic conditions they have been facing. The apparent paradox represented by decaying socioeconomic conditions and improvements in the educational chances needs to be disentangled by research as much as the relationship between teacher perceptions and actual chances of the disenfranchised. They probably are inextricably tied together.

Research along lines like these certainly will provide invaluable elements to advance our understanding on how schools and teachers operate and how education relates to the social, economic and political settings in which it develops. Carrying out research along these lines means, in short, managing to bridge the gap between micro and macro approaches. Research of this kind is equally relevant for public policies aimed at building a democratic educational system. And here we come full circle to the partial illustration that begins a few paragraphs back. To be effective, these public policies also need to count on that other type of research, which provides reliable evidence on repetition, dropout and other elements on the performance of educational systems.

Research of the kind being discussed here demands considerable amounts of human and material resources accumulated over time. It is not a task for artisans, no matter how competent they might be; this is a task for research teams enjoying at least some stability and continuity in their endeavors. Institutional capacity in the region seems to have reached this level of maturation although a number of limitations still prevail.

Institutional capacity and its needs

In order to be able to cope with these challenges, educational research in Latin America needs to have its institutional capacity enlarged and consolidated. This section addresses this issue in regard to the training of researchers, funding, exchange and information networks.

Training of researchers. One major issue for developing research in the years ahead is the process of building an endogenous capacity for training researchers. This function is being partly fulfilled by graduate programs and independent research centers. It needs to be strengthened and there are a number of available alternatives for that purpose. One alternative is to provide additional support to graduate programs in education, particularly at the doctoral level. As it has been noted (Brunner, 1987),

training should be concentrated in those programs where there are established research teams, where students are effectively able to do research and where informal exchange networks have been developed, involving peers and institutions beyond national frontiers and preferably reaching the international academic setting. Additionally, these programs and the institutions that harbor them need to be periodically evaluated, an endeavor that poses quite a few challenges (Velloso, 1990), but that is strictly necessary to enhance their academic credentials before society at large.[19]

Training in national doctoral programs certainly is one alternative to be pursued. But in the process of building an endogenous research capacity the keyword is diversity. A number of non-conventional arrangements could be envisaged. One of these alternatives is "split-doctorates" which has proven to be successful in Brazil and which is being tried in Chile. Under this sort of arrangement students pursue most of their studies in local doctoral programs but spend up to a year abroad, usually before writing their dissertations (or during part of the time devoted to this). Two advisors are involved in this process. This kind of doctoral program cuts down costs relative to training abroad, relies heavily on national personnel, provides a fruitful international academic experience to students as well as a continuing opportunity to consolidate exchange networks between national institutions and faculties, and peers and universities abroad.

A similar arrangement could be envisaged with the participation of local independent research centers. Sometimes this is simply a matter of converting informal practices into institutional arrangements. In the area of social sciences, for instance, the training of doctoral students in the region often has been enriched or partly accomplished by means of their active participation in research projects conducted in independent centers.

Non-conventional alternatives to set up graduate programs could also be arranged. They are particularly relevant for those countries (or for regions within countries) in Latin America where experienced researchers are relatively scarcer. A number of successful experiences recommend the adoption of non-conventional alternatives. As it often happens in academically younger institutions, some of the faculty members are undergoing graduate training and there is not a sufficient number of qualified persons to establish a graduate program. Under these circumstances, graduate programs may be set up by means of a

consortium of institutions or by means of a consortium of professionals. In the former, two or more different institutions located not too far apart join their efforts to set up a program. In the latter, one institution counts on the periodic cooperation of faculty from other universities.[20] These alternatives, which apply to the initial stages of development of a program, attempt to make an optimum use of qualified professionals that are scattered among various institutions in a given area. The adoption of either of these alternatives may originate in the institutions involved, but their chances of success are greatly increased if public policies are designed and implemented to that effect, particularly in regard to the consortium of professionals (Velloso, 1985b).

Fellowships for graduate training abroad, mostly in Europe and the U.S., have played a very significant role in generating a research capacity in the region. For a number of countries they will probably continue to play this role for some time in the near future. In others, this continues to be a relevant alternative and there is demand for it. Financial constraints, however, tend to reduce its development, which probably should be increasingly considered in association with the other alternatives discussed above.

Another relevant dimension has to do with continuing opportunities for professional improvement. This is closely related with the need to enlarge and consolidate exchange networks within the region and beyond its frontiers. Good research depends upon the availability of these opportunities for those that conduct it. Sabbaticals, visiting faculty or visiting research fellowships, although being a must for the advancement of research are not sufficiently developed in the region and badly need to be fostered, especially as an avenue to reinforce exchange networks with the international community of peers.[21] Equally important, although less costly and already more developed, is attendance at seminars, workshops and the like. Perhaps an important step toward the improvement of exchange networks within countries as well as in the region could be to stimulate the creation of national associations of researchers (the ANPEd experience has been quite successful in this regard) and to promote annual regional and sub-regional meetings of educational researchers.

Funding. Stability and flexibility are key issues in the financial support of research activities in the region. Another major issue is the availability of resources. Latin America has been and continues to be deeply affected

by the economic crisis. The effects of foreign debt have an overriding importance; as it is known, the region has become an exporter of huge amounts of capital relative to its income. In this regard, international and donor agencies are called to play an exceedingly relevant role, above and beyond their performance in the past, which has allowed many research centers to develop. Much of what follows takes into account this expected role.

As it is indicated by past experience, success in research funding requires that stability and flexibility go hand in hand. Stability is crucial to sustain the accumulation of knowledge; research projects and teams, training of researchers as well as information and exchange networks are easy to be dismantled but it takes long periods of time and maturation to build them. Flexibility is required to cater to diverse needs and there are a number of experiences in the region suggesting how flexibility can work towards the effectiveness of resources spent.

Helping new associations of researchers to be established with seed money does not entail large sums of resources but may yield high returns. The same applies to the establishment of new professional journals; once the first issue with a good academic standard is published by the concerned researchers, the following issues may be aided with relatively modest sums but with considerable impact. If sponsoring regional meetings entails somewhat larger sums, then a small consortium of agencies could be organized to provide support and to maintain its regularity. Setting up information networks may require non-negligible sums but improving and expanding the existing networks are much less costly and would greatly enhance knowledge building in Latin America.

Allocating funds to institutions may be one adequate strategy to support certain kinds of research but giving grants to projects may be an effective instrument to finance other kinds of efforts. The same applies, with some limitations, to support given to projects with topics defined by the researchers themselves instead of grants allocated to research whose topics are established by the financing agency. Allocating funds to institutions is a strategy that maximizes the use of resources in the case of consolidated research teams. Since these grants typically cover a period of a few years, they allow an efficient accumulation of knowledge on topics that have been previously studied, avoiding the dispersion of efforts that arise from ever moving targets. On the other hand, granting

funds on an individual project basis is useful to foster the development of individual or junior professionals that over time eventually would participate in or generate a research group.

Regarding the definition of topics, more often than not effectiveness tends to be greater when the topics are defined by the researchers themselves. Producing new knowledge is an endeavor in which one's intellectual curiosity and one's professional or academic concerns play a role of significant importance. Good studies may be produced with professional competence alone but excellent pieces of research require quite a bit of personal involvement as well. When the market for research is well developed, this rationale is devoid of any relevant contents, but this is not the case in several countries in the region. On the other hand, governments, private or non-government agencies sometimes need or wish to have specific topics studied. Following along the lines of the argument above, it seems that topics should be sufficiently widely defined as to allow a certain amount of personal discretion on the part of researchers and research teams. This may result in the usage of knowledge and experience previously accumulated in related topics, greatly enhancing the quality of the final product.

The establishment and consolidation of national research funds for research certainly is one avenue for increasing the stability of funding. But prospects in this regard currently are not very encouraging in the face of the economic crisis. Shortage of financial resources have been affecting national funds that have been set up more than a decade ago. At any rate, policies aimed at establishing and developing those funds should be encouraged, even if the amount of resources to be presently allocated to them is small. In addition to the contribution that they may represent to the advancement of research, however small it may be, when the crisis is overcome a significant step ahead would already have been made.

Networks, educational research and policy-making. In spite of the marked development of information networks, and of the exceedingly important services that they have rendered to research in Latin America, a considerable distance remains between what is produced and what is used by potential beneficiaries. Constraints seem to be greater in the distribution capacity of networks. A few improvements are needed in order to overcome these constraints. An increase in the number of associated institutions, especially within countries of the region, would

allow an easier and faster access to the products available. Libraries and/or documentation services in universities, independent research centers, germane government, international and donor agencies should be increasingly and more closely involved with networks. Special efforts should be made to diffuse information on the availability of what is produced. The above mentioned distance frequently is due to the fact that potential beneficiaries are not acquainted with the existence of the products. Most of these improvements, if not all of them, are likely to be more efficiently achieved with an adequate use of tele-magnetic media.

Two other kinds of improvements could also be envisaged. One has to do with an enlargement of coverage of publications processed as it relates, for instance, to countries other than those where headquarters are located. Effectiveness is enhanced to the extent that publications processed tend to be a good sample of what is actually produced in some previously defined universes. The other is not strictly related to networks but to the diffusion of relevant information in general. Thus one additional step for the improvement of information diffusion would be to replicate the Chilean "Who's Who" in the education field; although this may not be viewed as pertaining to the usual affairs of networks, professional associations perhaps should be encouraged to pursue this task and to benefit from the experience of networks in diffusing the product.

The distance between the production and users is likely to be larger when the two parties involved are researchers and policy-makers. A recent review on the effectiveness of research to change educational reality points out three possible hypotheses, not mutually exclusive, to explain observed limitations (Latapí, 1990). One of these hypotheses argues that the findings of research usually are not known by decision-makers. Information diffusion processes typically are not able to narrow the distance between original sources and decision-makers. The way out of this problem is to increase the effectiveness of these processes. Some of the suggestions for the general improvement of information networks apply to the present case. The second hypothesis notes that the impact of educational research on policy-making is a function of the innovative character of the latter. This implies that policy-making looks for innovations and would tend to incorporate them whenever they are provided. A third hypothesis argues that the effectiveness of the products of educational research in regard to policy-making depend heavily on the

trends followed by policies that are being adopted. Results from research will or will not be used according to their usefulness to policies that are being or have been previously designed.

Since the interests of groups and social strata are paramount in the determination of the design and implementation of public policies, the explanatory power of these three hypotheses are probably indirectly related to the order of their presentation. Accordingly, educational research findings could be used by decision-makers if they fit the framework of policies. Once this condition is satisfied, their incorporation is more likely to occur if they have innovative contents. But such incorporation obviously cannot occur if the product is not known to the decision-maker.

If this rationale is true, then the issue of the usage of the products of educational research in policy-making entails two different viewpoints. From one vantage point, information networks need to be continuously improved in order to make research products known to decision-makers. This certainly is needed, whatever the standpoint that is taken. Nevertheless, according to the third hypothesis, consistently handing out research products to decision-makers gives no assurance that they will be used. Assuming that some of these products are relevant for policy-making, that is to say, to introduce changes in education, then another vantage point gains relevance. This has to do with the diffusion of research findings in society at large. Effective information networks may have a role to play but here the issue is essentially a political one. Society at large needs to be informed about research findings that are likely to lead to changes in education. Constituencies, interest groups and various kinds of organizations in civil society, particularly those concerned with the construction of a democratic order, need to know what educational research has to offer to that effect. The dialogue and the legitimate pressures that are likely to ensue certainly would help to translate relevant research products into public policies.

The contribution of these products to promote changes in education are likely to have an enhanced social relevance if research efforts succeed in coping with the challenges that are currently being posed and if they can account for their basic role in generating new knowledge. Paraphrasing a statement on the roles of educational research,[22] it may be said that one of its tasks is to indicate what education ought to be, but not to

propose grandiose recommendations or strategies that will be promptly adopted by decision-makers within the State. Its major role is to be particularly concerned with the discovery of unintended and unrecognized consequences of educational processes but also with uncovering relationships of inequality and domination that are so pervasive in Latin America. In addition, educational research should deal with analyses of conflicts and contradictions that underlie educational systems, from classrooms to schools and society at large, enlightening our understanding of these processes and attempting to identify concrete arenas and actors that can generate and carry out educational change, with a special view to two elements inextricably tied together, the chances of the disenfranchised and the process of building a democratic order in the region.

Notes

1. This means that, when reviewing the literature, I will replace original usages of the term paradigm by the term approach or its correlates.
2. One of the authors raises the issue of the purity of Latin American research in the English version of the study (which deals with aspects not discussed in the Spanish version, a translation of a paper given at the American Educational Research Association). As he indicates, over two-thirds of the abstracts reviewed "could not be neatly classified into any one of the three conventional research categories: descriptive, historical or experimental" (Egginton, 1983:127). It should be noted, however, as he himself indicates, that publications reviewed in the *Handbook* comprised a wide variety of texts, ranging from books, journal articles and government reports to "annotated bibliographies, volumes of unanalyzed data, conference proceedings, serial journals, and other unsystematic descriptions of unclassified publications" (Egginton, 1983:123). It may be added that government reports hardly could be classified in any of those above mentioned "conventional research categories" simply because they do not belong to the category of research reports.

3. In the following pages, references to periods of time are mere approximations since no clear cut points can be established for the evolution of educational research. It should also be noted that, notwithstanding Brunner's (1984) relative emphasis on diversity, he recognizes the dominance of several of the characteristics discussed in this section.
4. Elsewhere I dealt with this issue in the context of approaches to the study of educational phenomena (Velloso, 1985a).
5. RAE contain abstracts of publications like research reports, essays, proceedings of meetings and seminars, teaching materials, reports on innovations and experiences – including documents from governments and international agencies. Explicitly excluded are documents similar to those collected or prepared by other information systems (e.g., bibliographies, summaries). The reader will note a number of similarities between REDUC's coverage and that of the *Handbook of Latin American Studies* (see note 2 above).
6. The expected over representation of what is produced in Chile actually occurs. The authors also note that the headquarters of a number of international agencies (like UNESCO/OREALC, PREALC, CEPAL) are located in that country, thus access to documents from these agencies is easy, producing similar biases in the representativeness.
7. Group I comprised Argentina, Brazil, Chile, Mexico, Uruguay and Venezuela. Group II: Colombia, Costa Rica, Dominican Republic, Ecuador, Jamaica and Paraguay. Group III: Bolivia, El Salvador, Guatemala, Haiti, Honduras and Nicaragua.
8. This almost abysmal difference may be illustrated by some estimates for the development of science and technology in Brazil. This country, which has one of the relatively well developed science and technology systems in terms of the standards for the region, would have to increase its stock of scientists, in all areas by ten times during the coming two decades if it is to be able to face international competition in economic, scientific and technological development, as estimated by Rocha Neto (1991). This estimate is obtained taking into account the density of scientists relative to the economically active population in Brazil and in countries of Central Europe. Although some changes in the current profile of the production of scientists may be required, and straightforward comparisons of the density of scientists may yield too crude approximations, this figure might be viewed as a low estimate bound since Central European countries have four times less scientists per worker than the U.S., Japan or the Soviet Union.
9. Currently there are approximately 680 doctors of education in graduate programs (M.A. and Ph.D. programs) in Brazil, as an ongoing survey indicates (Velloso, 1991b). Students in education and teacher training in the country correspond to about 15 percent of the total enrollment in higher

education. This is very close to the Latin American average and both proportions will be assumed to be equal (see Table 2). Taking the ratio of doctors in education to total higher education enrollment in Brazil (0,488:1, in thousands) and applying to total higher education enrollment in the region yields a figure of approximately 2,800, which would correspond to the number of researchers in education holding a doctor's degree in graduate programs in the region. Data by Garcia-Huidobro, Ochoa and Tellez (1989:Table 16) show a ratio of about 2:1. Assuming that the number of publications is linearly related to the number of researchers, independent centers would count on some 5,600 researchers. Adding these researchers to those from universities, a total of 8,400 is obtained.

10. This process was not peculiar to education; rather, it affected faculty from all fields of knowledge, particularly in the social sciences (Brunner and Barrios, 1987; Argenti *et al.*, 1988).
11. Public policies of the late 1980s, particularly those of CONICET, are attempting to counterbalance some of the effects of earlier political repression. These include, as reported by Vior (1990), setting up links between universities and independent research centers, in addition to providing support for scientists returning to the country.
12. Brazil's INEP has been quite productive in the past; as a matter of fact, until the 1960s its five regional branches led in the production of educational research in the country but they progressively yielded to graduate programs in universities. A few years ago its outstanding library on education was dismembered and the agency presently finances research projects, runs a traditional journal and maintains a documentation service.
13. As reported by Latapí (1990) in some instances faculties salaries have lost 50 percent of their original purchasing power.
14. One of the noteworthy exceptions is SAREC (Sweden) which gives institu tional grants, allowing greater flexibility than most other financing schemes.
15. There are a number of other similar associations in the social sciences and humanities field (economics, sociology, political science, anthropology, history and philosophy).
16. Differences like these, between official statistics and what actually goes on in the real world of education, are a clear-cut illustration of some of the shortcomings of information systems discussed by Chinapah, Löfstedt and Weiler (1989). Information systems for educational planning and policy-making tend to emphasize quantitative instead of qualitative data and easily measurable criteria or indicators, although the latter are less significant. These shortcomings, in addition to their implications for planning and policy-making, also affect educational research efforts – particularly those based on macro-social approaches – that often rely on official statistics.

17. A somewhat similar process apparently occurs in public secondary education in Brazil. It seems that a substantial fraction of the dropouts recorded in official statistics, typically adults already engaged in the labor force, do not report their previous educational experience when returning to another school a few years later (Velloso, 1991a).
18. Here I am referring to some of the dissertations for M.A., Ph.D. and *privat docenz* degrees, presented in the past few years at the University of São Paulo and at the Pontifical Catholic University of São Paulo.
19. This is a relevant issue in the academic development of institutions. I have previously dealt with it, and other related topics, when discussing the accountability of public universities and some of the challenges posed by the evaluation of research and other academic products in scientifically peripheral countries (Velloso, 1990).
20. These two alternatives have been combined for the creation of a doctoral program in comparative studies in the region, cutting across national frontiers and relying on the faculties of the University of Brasília and of the Latin American Faculty for Social Sciences (FLACSO). The joint FLACSO (Brazilian Program)/University of Brasília Doctoral Program is addressed to the social sciences but has one area of studies on higher education. Different from the alternatives discussed in the text, the cooperation of diverse institutions and faculties were not established as the initial stage of the graduate program and, in the present case, while the two institutions are located in one single campus, most of the faculty members of FLACSO are visiting scholars originating from different countries in Latin America.
21. See, for instance, the discussion by Garcia-Guadilla (1991b).
22. The original definition, in a text from IDRC (1985:12), *apud* Gajardo, 1986:46) is that "research is not seen necessarily as the means to propose grandiose recommendations or to design strategies that will be readily adopted by the official educational systems. Rather, it should have a special role in the discovery of unintended or unrecognized consequences; in the analysis of contradictions and conflicts within the system, particularly in schools and classrooms and in the identification of concrete arenas and actors that can generate and carry out educational and social change."

References

Argenti, G. *et al.* 1988. *Ciencia y Tecnologia - un Dagnóstico de Opportunidades*. Montevideo: Center for Information and Studies (CIESU) and the Ministry of Education and Culture.

Brunner, J.J. 1984. "Algunas consideraciones sobre la investigación educacional en America Latina", prepared for the IDRC of Canada, *Working Paper 202*, FLACSO/Santiago de Chile

_____. 1987. "La formación de recursos humanos para la investigación en America Latina", presented at the Regional Seminar on Human Resources Development for Educational Research in Latin America, sponsored by CIID, Salvador, Brazil.

Brunner J.J., Barrios A. 1987. *Inquisición, Mercado y Filantropia*. Santiago de Chile: Latin American Faculty of Social Sciences (FLACSO).

Cano, D. 1985. *La Educación Superior en Argentina*. Caracas: FLACSO/Programa Buenos Aires and CRESALC/UNESCO.

Cariola, P. 1991. "The history of educational research development in Latin America, 1960-1990", presented at the meeting on "Strengthening Analytical and Research Capabilities in Education - Lessons from National and Donor Experience", sponsored by the *Deutsche Stiftung fur Internationale Entwicklung*, in Bonn, July 1991.

Chinapah, V.; Löftstedt, J-I.; and Weiler, H. 1989. "Integrated development of human resources and educational planning". *Prospects*, v.XIX, n.1:11-32.

Córdova, R. *et al.* 1986. *A Pós-Graduação na América Latina: O Caso Brasileiro*. Brasília: CRESALC/UNESCO and CAPES, Ministry of Education.

Costa Ribeiro, S. 1990. "A pedagogia da repetência", Rio de Janeiro: National Laboratory for Computing Science, National Council for Scientific and Technological Development (CNPq).

Cunha, L.A. 1978. "Os (des)caminhos da pesquisa na pós-graduação em Educação (proceedings), pp.3-15. Brasília: CAPES, Ministry of Education.

_____. 1989. "A universidade brasileira nos anos oitenta: Sintomas de regressão institucional". *Em Aberto*, v.7 July/Sept.:1-9.

Donoso, S. 1987. "Investigación educacional en Chile: Un ensayo de ordenamiento". *Estudios Sociales*, n.54 (4th Quarter):73-91.

Egginton, E. 1983. "Educational research in Latin America: A twelve-year perspective". *Comparative Education Review*, v.27 (February):119-127.

Egginton, E.; Koppel, S. 1983. "Tendencias de la investigación educativa en America Latina". *Revista Latinamericana de Estudios Educativos*, v.13 (3rd Quarter):117-147.

Fávero, O.; Cruz, M. 1990. "Análise da política de pós-gradução em educação", presented at the XIII Annual Meeting of the National Association for Graduate Study and Research in Education (ANPEd), Belo Horizonte, Brazil, Oct. 1990.

Gajardo, M. 1986. "Educational research in Latin America: Highlights and trends", presented at the 13th Anniversary Meeting of the Comparative and International Education Society, Toronto, Canada, March 1986.

Garcia-Guadilla, C. 1991a. "Mirada al futuro a partir de una vision retrospectiva. El caso de la investigación en educación superior en America Latina", presented at the "International Meeting on New Roles of Higher Education: The case of Latin America and the Caribbean", sponsored by CRESALC/UNESCO, Caracas, May 1991.

_____. 1991b. "Postgrado y nuevos contextos para el caso de America Latina". *Revista Educación Superior y Sociedad*, v.2, n.1 (June):87-103.

Garcia-Huidobro, J.E. 1988. "Investigación educacional en America Latina: Algunas reflexiones sobre su desarollo y sus marcos conceptuales". *Anais de Seminario Latino-Americano de Institutos de Pesquisa em Educação*, pp.10-41. Brasília: INEP, Ministry of Education.

Garcia-Huidobro, J.E.; Ochoa, J. and Tellez, F. 1989. "Tendencias de la investigación en educación en America Latina". Santiago de Chile:Latin American Network of Information and Documentation on Education (REDUC).

Gatti, B. 1983. "Pos-graduação e pesquisa em educação no Brasil". *Cadernos de Pesquisa*, n.44 (February):3-17.

_____. 1986. "Retrospectiva da pesquisa educacional no Brasil". Proceedings of the seminar on "Pesquisa Educacional e Política Educacional no Brasil e na América Latina", pp.29-42. Brasília: University of Brasília.

Goergen, P. 1986. "A pesquisa educacional no Brasil: Dificuldades, avancos e perspectivas". *Em Aberto*, v.5 (July/Sept.):1-18.

Gutierrez, G. 1988. "Panorama de la investigación educacional en America Latina", *Working paper 1/1988*. Santiago de Chile: Latin American Network of Information and Documentation on Education (REDUC).

Ibarolla, M. 1988. "Avaliação da produção científica em educação - tendências teóricas e metodológicas" (Round Table). *Anais do Seminario Latino-Americano de Institutos de Pesquisa em Educação*, pp.198-202. Brasília: INEP, Ministry of Education.

IDRC. 1985. "Understanding the relationship between education and development: The case of Latin America", Education Program Review, Manuscript report, IDRC, Canada, *apud* M. Gajardo, 1986.

Kuenzer, A. 1986. "A pesquisa em educação no Brasil: Algumas consideracoes". *Em Aberto*, v.5 (July/Sept.):19-23.

Kuhn, T. 1970. *The Structure of Scientific Revolutions*. 2nd ed., Chicago and London: The University of Chicago Press.

Latapí, P. 1990. "La recherche educative en Amerique Latine. Quelques defis a relever". *Perspectivas*, v.XX, n.1:53-60.

Lopez, G. 1991. "Factor humano: Desafios y opciones". *Revista Educación Superior y Sociedad*, v.2, n.1 (June):36-57.

Mello, G. 1985. "Pesquisa educacional políticas governamentais e o ensino de 1° grau". *Cadernos de Pesquisa*, n.53 (May):62-72.
Oteiza, E. 1991. "El post grado en la Argentina. Elementos para una estrategia en el contexto de America Latina". *Revista Educación Superior y Sociedad*, v.2, n.1 (June):58-67.
Rocha Neto, I. 1991. "A universidade pública, a formação de quadros e o país". In: J. Velloso (ed.), *Universidade Pública - políticas, desempenho e perspectivas*. São Paulo: Papirus.
Saviani, D. 1983. *Escola e Democracia*. São Paulo: Cortez e Autores Assoc.
Shiefelbein, E. 1972. "A comunicação entre os centros de pesquisa educacionais". *Cadernos de Pesquisa*, n.5 (Nov.):19-30.
_____. 1990. "La recheche educative en Amerique Latine. Du stade artisanal au stade industriel". *Perspectives*, v.XX, n.1:61-67.
Tedesco, J.C. 1985. "Paradigms of socioeducational research in Latin America". *Comparative Education Review*, v.31 (November):509-532.
_____. 1989. "El rol del Estado en la educacion".*Perspectives*,v.XIX,n4:489-511.
Velloso, J. 1985a. "Dependency and education: Reproduction or conspiracy?" *Prospects*, v.XV, n.2:206-212.
_____. 1985b. "Alternativas para o doutorado em educação no país: Um comentário". *Educação e realidade*, v.19 (May/Aug.)89-94.
_____. 1990. "University governance, autonomy and accountability in Brazil: A couple of challenges for the decade", presented at the "International Congress on Planning and Management of Educational Development", sponsored by Unesco, Mexico City, March 1990.
_____. 1991a. "A caminho do ensino médio obrigatório e gratuito: Recursos e políticas". In: C. Cunha *et al.*, *Ensino Médio como Educação Básica*. São Paulo: Cortez.
_____. 1991b. "Pesquisadores em educação: Cadastro e bases de um banco de dados", Univeristy of Brasília, (in progress).
Vielle, J-P. 1985. "1984, La investigación educativa en la encrucijada". *Revista Latinamericana de Estudios Educativos*, v.14, (4th Quarter):69-85.
Vior, S. 1990. "La universidad argentina, 1983-1987". In M.L. Franco and D. Zibas (eds.), *Final do Século-Os Desafios da Educação na America Latina*, pp.181-201. São Paulo: CLACSO/REDUC and Cortez.
Warde, M. 1989. "Papel da pesquisa na pos-graduação em educação e a redefinição curricular do cursos", presented at the "XII Annual Meeting of the National Association for Graduate Study and Research in Education" (ANPEd), São Paulo, May 1989.
Zubieta, L.; Sandoval, R. 1985. "La investigación educativa en Colombia: Nuevos rumbos". In: F. Madeira and G. Mello (eds.), *Educação na America Latina -Os modelos teoricos e a realidade social*, pp.173-185. São Paulo: Cortez and Autores Associados.

Educational Research in the Caribbean

Faith Wiltshire and Lucy Steward [1]

Although educational research in the Caribbean has had a relatively short history, over the last thirty years the region has acquired the basic infrastructure for conducting research activities. The establishment and development of the University of the West Indies (UWI) has had a major impact on this development and on fostering a research climate in the region. There are now several institutions and ministries which engage in educational research and whose activities in part or whole have been influenced by the work of the University.

In addition, there is an increasing awareness, especially at the political level, of the need for research findings to inform decision-making in the educational sector. This is due mainly to the failure of various *ad hoc* measures to effect meaningful change and to the high cost and low returns of activities based on hunches and impressionistic views.

At the seventh meeting of the Caribbean Community Standing Committee of Ministers of Education (SCME) in 1988, the ministers reflected on some major concerns in education. Among these were: the decline in functional literacy and the low level of numeracy skills in the general population; ill-defined approaches to the introduction of computer education in schools; the inefficiency of foreign language teaching; the insufficient attention paid to education for living; the absence of constructive education about the environment; the inappropriate range and

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orientation of skills produced through the educational system; and the lack of a conscious education program for fostering regional integration.

Consequently, the SCME mandated the Caribbean Community (CARICOM) Secretariat to undertake a series of consultations on and in-depth analyses of education. An Advisory Task Force on Education, consisting of some of the leading professionals in the region, was appointed in 1990 to facilitate these processes and the work of this Task Force is outlined later in this paper. The Task Force has determined that one of its strategies for finding solutions to the problems posed in the concerns outlined above must be to use research as a major tool for understanding the problems.

Education in the Caribbean community

Concerns about education require consideration not only of factors related to schools, but also of the environmental changes and trends that have an impact on the educational sector. This section, therefore, gives a brief description of the educational system and its context in the English-speaking Caribbean.

The Community comprises thirteen member states, from Belize in Central America to Guyana in South America. The Eastern Caribbean countries have also grouped themselves at a sub-regional level as the Organisation of Eastern Caribbean States (OECS). The Community is served by the CARICOM Secretariat based in Georgetown, Guyana. The Secretariat for the OECS is based in Saint Lucia.

Education in the English-speaking Caribbean was developed along the traditional lines of the British educational system. Children enter primary school at age five and after six years are required to take the Common Entrance Examination, an aptitude test for the selection of students for secondary schools. One member state now has enough school places at the secondary level for all primary school graduates and has therefore eliminated the Common Entrance Examination. Several other territories are examining strategies to phase out this examination.

There are several types of secondary schools across the region. In some territories the structure consists of a five-year program, the first three years of which are spent in a junior secondary and the final two in

a senior secondary school. There are also five-year schools where the entire secondary program is done in one school and seven-year schools where some students continue after the fifth year to an advanced level program. Some senior secondary schools offer both academic programs and technical/vocational education and training.

The terminal examinations for secondary schools are set by the Barbados-based Caribbean Examinations Council (CXC), a CARICOM institution. In a well-organized system and with the necessary security measures, scripts are set by Caribbean examiners and marked by Caribbean teachers at centers across the region. As part of a strategy to make the educational system more responsive to the needs of the region, CXC has introduced several innovations in its operations, developing, researching and revising curricula based on feedback from teachers. One such feature is the school-based assessment component in several subject areas. CXC has conducted training workshops to orient teachers towards this innovation and to assist them in developing the skills necessary for doing the assessment at the school level.

Those students who are not placed in secondary schools continue their education at the primary level, or in post-primary centers or at trade centers. The demands of the Common Entrance program, with its heavy emphasis on drilling students in a narrow range of subjects, has left too many students ill-prepared to cope successfully with the secondary school program. The learning problems of these students are compounded at the secondary level, so that a relatively large number of young people leave school with inadequate skills in literacy and numeracy or without the basic skills required for entry into the work place. Some territories have had to mount major remedial programs for these young people. For example, Trinidad and Tobago presently has a program called Youth Training Enterprises Partnership Programme (YTEPP) targeted to this out-of-school population.

These remedial programs are short-term measures to address some immediate problems. However, policy-makers and educators recognize that research is required to define problems and to recommend strategies for reform, in order to meet both the short and long-term needs of the region.

Regional economic trends and their impact on education

In 1990 most CARICOM countries experienced economic growth, although the general trend over the last six years was one of negative or slow growth. Growth was realized mainly in the agricultural sector. Inflation increased mainly because of rising international inflation and the increased prices in imported petroleum. The general picture is one of declining income, increasing foreign debt, diminishing foreign exchange reserves, and rising unemployment.

Unemployment is a critical concern in the region, and when account is taken of the under-employed and the disguised unemployed, the real unemployment levels are generally accepted to be higher than statistics show. Over the past year, the employment rate in Barbados increased slightly. In Jamaica, there was also a slight increase due in part to a declining labor force. Trinidad and Tobago also experienced a slight increase, mainly in the commerce and service areas. Female unemployment is significantly high and is almost double that for men in Barbados and Jamaica.

In a study entitled, "Caribbean Development to the Year 2000", Bourne (1988:xviii) reported that unemployment is now a greater problem than it was in the past decade. He observed that:

> Open unemployment rates range from 15 per cent to 25 per cent of the labour force, with Jamaica and several OECS countries located at the upper end of this scale. The incidence of unemployment is considerably greater among young people, among women and in rural areas. The return to such high rates of unemployment after moderate progress in the 1960s is stark evidence of economic retrogression with the potential for social disorder. For all Caribbean Community countries, unemployment and falling standards of living are the major problems for the remainder of this century.

In this context, structural adjustment measures have been introduced as major strategies. The attendant successive devaluations, increases in inflation rates, and reductions in the disposable income of households have had a negative impact on the educational system. In some countries, governments have been forced to remove the assistance and social services provided. For example, the provision of free textbooks and

school meals have been reduced or eliminated altogether. Teachers' salaries have also declined, and the exodus of teachers to North America or to the more lucrative private sector, is a major concern in the provision of quality education.

The social problems resulting from these environmental factors have led to increasing demands on the school system. And with the emphasis on quality basic education, as articulated at the First Regional Consultation on Education in the Caribbean in 1989, as well as at the World Conference on Education For All in Thailand in 1990 and the Eleventh Conference of Commonwealth Education Ministers in Barbados in 1990, policy-makers in the region are developing strategies for the participation of social partners in sharing responsibilities for education and training. Against this background, educational research in the Caribbean has assumed greater significance.

The research community

Research requires the dedication of full-time professional staff. Unfortunately, many persons in the Caribbean who are expected to carry out research work also have other major service functions.

Across the region there are institutions with responsibility for research. These institutions are at various stages of development, ranging, in terms of capacity, from very advanced to almost insignificant. Table 1 below gives the parent institution of the research organizations in the different countries of the region. While, the information provided may be dated but is the most recent available.

The University of the West Indies

Research in education began in 1954 with the establishment of the Centre for the Study of Education, established as part of the University's Department of Education in Jamaica. The major functions of the Centre were "[t]o conduct research into local problems, collect data related to the school systems, act as a clearing house for the dissemination of educational information, and offer consultation to the various territories" (Miller, 1984:8-9).

Table 1. Parent institutions of research organization in the different countries

	Country						
Parent Institution	**Baha-mas**	**Barba-dos**	**Eastern Caribbean**	**Guy-ana**	**Jamai-ca**	**Trin-idad**	**Total**
University	-	2	-	2	3	2	9
College	1	-	-	-	1	-	2
Min. of Education	1	1	-	1	1	1	5
Other Ministry	-	1	-	-	-	-	1
Regional Body	-	1	-	1	-	-	2
Private/ Other	-	-	2	-	2	-	3
Total	2	5	1	3	8	3	22

Source: *Educational Research: The English-Speaking Caribbean.* (Miller, 1984).

These functions reflected the Centre's orientation to respond to regional needs and to use its research findings to influence public policy. Its successor, the Institute of Education in Jamaica, with sister centers in the University's other two campuses in Trinidad and Tobago and Barbados, facilitated the institutionalization of educational research in the region.

The kind of research work conducted, however, was not coordinated on a regional basis. Subjects for research stemmed from the particular interests of the researchers, and sometimes from the policy decisions of various governments. What the Institute did was to provide both a framework within which researchers could enjoy autonomy in their work and a setting in which inter-faculty collaboration could take place.

The position which the University enjoys today as a respected research institution in the field of education is to a large extent the result of the foundation laid by its research pioneers who by their commitment,

persistence, and single-mindedness were prepared to fund their initial research efforts out of their personal resources. The issues addressed there have been considerably widened to include gender studies, school management and supervision, teacher effectiveness, and street science versus conventional science.

The most recent research structure established at the University is the Educational Research Centre, opened in 1990 in Jamaica. The Centre plans to offer consultancy services for the public and private sectors. One such service will be a proposed tracer study of graduates of the secondary education system for the Ministry of Education in Jamaica.

Research is also conducted in other faculties at the University. Within the Faculty of Medicine, three units have conducted research related to education. The Tropical Metabolism Research Unit has conducted research related to nutrition and its effects on schooling and learning. The Department of Social and Preventive Medicine has researched the onset of puberty and its impact on schools, and the Medical Council Research Unit has researched areas such as the educational implications of sickle cell anemia.

In addition, the Institute of Social and Economic Research, with operations on the three campuses, also conducts educational research mainly as a component of multidisciplinary research projects. The Caribbean Institute of Mass Communication (CARIMAC) and the Consortium Graduate School, which offers graduate programs in multidisciplinary areas, are also engaged in research that can contribute to education.

Other tertiary institutions

In addition to the University of the West Indies, the University of Guyana also contributes to the research network of the region. Moreover, some tertiary level institutions, such as the College of the Bahamas and the Mico Teachers College in Jamaica, conduct research activities. These work closely with the Faculty of Education at the Mona Campus, Jamaica.

Ministries of Education

Research is also conducted in various departments of the Ministries of Education. However, personnel in these departments are not primarily engaged in research work. Consequently, valuable data are often collected and left unutilized because of lack of time and insufficient staff to do the necessary compilation and analysis. There are also other educational institutions which support the work of the Ministries through their research activities. Two examples are the National Institute for Higher Education, Research, Science and Technology (NIHERST) in Trinidad and Tobago and the National Centre for Educational Resource Development (NCERD) in Guyana.

CARICOM Secretariat and Advisory Task Force

The CARICOM Secretariat also plays a catalytic role in the development of research activities in the region. Because it services all member states through the Standing Committee of Ministers responsible for Education (SCME), it works closely with the University of the West Indies and other educational institutions to promote development activities in the region.

The most recent example of initiatives taken by the Secretariat has been the establishment of the Advisory Task Force on Education – the machinery for exploring the issues raised at the First Regional Consultation on Education in the Caribbean. The basis for the creation of the Advisory Task Force was the agreement among SCME members that a systematic and intensive process of regional consultation about the future of education should be undertaken to assess the present educational arrangements and concerns in the light of new and changing needs and contexts. This process would harness Caribbean intellectual power to the task of researching, analyzing and recommending the options for education in the Caribbean in preparing its citizens for coping with the challenges of the future.

The Advisory Task Force has proposed several action-oriented projects which will involve various actors: school supervisors, principals, teachers, parent and community groups. Through its projects, data will be obtained and opportunities created to develop research skills among teachers. A contribution will also be made to strengthen the research capability at the Ministry of Education in each member state.

Resources are required for the work of the Task Force which is envisaged to be a long-term process. This is so because of the nature of the task and the fact that research involves a sequence of events: a waiting period, a period of maturation and a period of analysis and exchange of ideas to provide the best possible interpretation of the data.

While the Advisory Task Force has a long range view of its work, it is building a contextual framework within which immediate concerns can be addressed. Recently, one member state raised a concern about obtaining substitute teachers for those who need to be trained. In addressing this concern, the Task Force has proposed two projects: a distance-education program, and the use of resource persons in the Caribbean Community – for example, retired teachers – to meet this need.

The Task Force is attempting to develop a "blueprint" for education for the future, using a methodology involving both research and consultation processes. So far the Task Force has held consultations in three territories, and a major consultation on primary education, as a follow-up activity to the World Conference on Education for All, is scheduled to take place in Belize in November 1991.

The outcome of the Consultation and research would be a better understanding of the causes of the shortcomings of the present system and identification of the strategies to address these concerns. The body of thinking obtained will be the basis for the formulation of a perspective about the kind of civilization envisaged, and the kind of Caribbean Community to be achieved on the threshold of the twenty-first century.

Caribbean network of educational innovation for development

The Caribbean Network of Educational Innovation for Development (CARNEID) is a Unesco program based in Barbados. It assists Unesco Member States in the region in their efforts to relate education to national development by strengthening national capabilities for the development and implementation of educational innovation. CARNEID's activities have been targetted mainly at the level of the Ministries of Education and the research work conducted has been in support of these activities. Its networking capability is therefore limited with respect to research and bringing the wider community of researchers together in the region.

The network comprises four components: the associated center, national coordinating groups, regional consultation meetings, and a coordinating center. The priority areas in CARNEID's operations are the contribution of education to work, cultural identity, community development, and the planning and management of education. Some examples of CARNEID's research work are national studies on education and work, the attitudes and practices of chief education officers, the teaching of mathematics in primary schools and practices in special education. In addition to its research activities, CARNEID is contributing to the development of research capability in member states through regional training workshops.

Teachers

Broomes (1981), a leading researcher in education, advocates the involvement of several actors in the research process and emphasizes the importance of the classroom practitioners in research. Teachers become involved in research when they enter the university to do teacher training, to study in a graduate program or to assist a researcher who may be doing school-based research. This has proven to have many benefits. First, university researchers are able to build a network throughout the national/regional educational system. Also, as teachers and other educators graduate from the faculty of education and are promoted to policy-making positions in the public service sector of the region, they have a greater appreciation of the value of research in educational reform. The educational experiments conducted by the Institute of Education in Jamaica in teaching English to first-graders were successful, in the long run, because among those who participated in the projects were former graduates and teachers who were sufficiently sensitized and committed to the project, having seen the impact of this work on students' performance. They were then able to influence governmental policy to give continuing support to a worthwhile project.

The training of teachers on a larger scale to participate in research activities will require resources – both human and financial. However, already some small steps are being taken through the work of the Advisory Task Force on Education to widen the participation of more teachers in research activities.

Private enterprise

Research activities in private enterprise is very limited, with only three research institutes established as a result of private enterprise having been identified. These are the Mel Nathan Institute in Jamaica, the Folk Research Centre and the National Research and Development Foundation in Saint Lucia.

These institutes do not contribute significantly to educational research, but their establishment has signalled the potential development of a research capability in education within the private sector.

In Trinidad and Tobago, a small non-governmental organization (NGO) of women researchers was formed in 1985 to provide opportunities for women to enhance their research skills while working on an action-oriented research project. This group, Researchers for Education Action and Development (READ), conducted research on the attitudes of women to their health condition, with particular reference to diabetes and hypertension, with a view to developing an educational program to improve the health and well-being of women and their families.

The organization and management of educational research

Coordination of research

Effective determination of research priorities requires the presence of appropriate coordinating mechanisms and the development of a policy for research in education to give meaning to the structures adopted.

In the Caribbean region, however, there is no central mechanism for determining research priorities and establishing research policies. The University of the West Indies, as the leading research institution in the region with a small, but growing, cadre of professional and internationally respected researchers, has the greatest potential for becoming the focal point around which a central mechanism can be best created and developed.

In the absence of a formalized coordinating system capable of bringing together the community of researchers, cooperation is maintained through informal contacts at different levels in the educational sector.

Some measure of success has been realized through collaborative efforts between researchers and governments.

The benefits of such collaborative efforts have included:

a) the creation of teams of researchers;

b) the development of some truly regional projects;

c) the employment of some full-time research personnel;

d) the continuing support of the work of the pioneering researchers;

e) the securing of sizeable grants from international funding agencies on longer term basis; and

f) the strengthening of networks between Ministries of Education, researchers and the university.

Linkages among the institutions are recognized as essential for sharing information, avoiding duplication, evaluating research and attempting to enhance the impact of research findings on decision-making at various levels.

The staff at the University of the West Indies hold regular seminars and have instituted a regional conference, held every two years at which research work is reviewed and discussed. In addition, informal sessions facilitate sharing of information among researchers. However, an institutionalized system of coordinating and evaluating research is needed since institutions are often unaware of each other's activities.

Policy-making

Another missing element in the research mechanisms of the region is a policy-making body for educational research. National governments are increasingly recognizing the importance of research in decision-making. However, there is no national policy for research in any of the member states, although the need to rationalize the use of scarce resources in the context of a structural adjustment regime, requires informed decision-making at the policy level.

In the region, policy-makers have in the past tended to ignore research findings that can impact on policy. Miller (1984) explained that the relationship between policy and research is haphazard and the difficulty in establishing a relationship could be due to inherent

differences in the policy-making and research processes. According to Miller, policy has a crisis character, tends to be universal and all embracing, requires urgent, immediate and instant responses, proceeds with little reflection, is sensitive to public opinion and thrives on consensus. Research, on the other hand, has an idealistic orientation, deals with samples, involves critical evaluation and usually challenges conventional wisdom and common sense.

Funding and the role of international agencies

Many sound research project proposals have failed to get off the ground because of a lack of funding. Invariably, the researcher in the Caribbean region has to provide the funds necessary for the appropriate ground work. The search for funding at the national level can be as frustrating as the search internationally. The national private sector is not yet sufficiently sensitive to the role it can play here. Attracting funds internationally is dependent on the reputation of the researcher, so that inexperienced and unknown researchers with sound projects have great difficulty starting. This situation is alleviated somewhat where funding agencies have a deliberate policy to foster research in specialized subject areas and to develop certain groups of researchers.

International agencies contribute to research work in the region mainly through the provision of funds. In 1954 the Carnegie Corporation provided funds for the establishment of the Centre for the Study of Education at UWI in Jamaica. Later in 1963, the Ford Foundation provided funds to facilitate the establishment of the Institute of Education. The Institute also attracted funding from the Centre for Educational Development Overseas (CEDO) of the Ministry of Overseas Development in Great Britain, the United Nations Educational, Scientific and Cultural Organization (Unesco), and the Bernard Van Leer Foundation. The Inter-American Development Bank (IDB) is presently funding projects with research components in Guyana and Trinidad and Tobago.

Other agencies which contribute to the growth of research in the region are the United Nations Development Programme (UNDP), the World Bank and the International Development Research Centre (IDRC) in Ottawa. IDRC sponsored the work of Dr. Errol Miller in researching

and documenting educational research in the English-speaking Caribbean. It also sponsored the work of a small group of women researchers (READ), a direct result of its policy to focus on health education issues and on the development of women researchers.

In 1990, the Canadian International Development Agency (CIDA) signed an agreement to provide funds for a Canada/UWI Institutional Strengthening Project which will direct research work to be determined by the University and regional organizations. The University is the executing agency for this project whose management structure reflects a greater involvement of regional professionals than has been obtained previously in designing and implementing projects. This is in sharp contrast to experiences in the past, where Caribbean researchers often have had to work within parameters determined by the funding agency and adjust their priorities to fit a set agenda.

The duration of funding from international agencies is a serious concern. Where the funding period is of a shorter duration than that of the research project, much valuable work is aborted when funding is discontinued. Sometimes, to meet funding requirements, a project's research framework is conceptualized in haste, resulting in wasted efforts, the accumulation of questionable data, and the creation of more serious problems in the long run.

There is no doubt that international funding for research is required in the region. Such resources could be used to develop and strengthen the existing basic infrastructural elements such as: trained researchers; post-graduate degree programs in which research methodology courses are compulsory; coordination at the institutional level; collection of indigenous literature; and basic support services.

Priority fields for educational research

In 1981 at the Meeting of Caribbean researchers, policy-makers expressed the need for "bread and butter" research – research that can inform decision-making and contribute to change. At the First Regional Consultation on "The Future of Education in the Caribbean" in 1989, the re-shaping of the educational system and the delivery of a service in consonance with the needs of the community were identified as top

priorities. Some areas which need to be re-examined in this regard include administration, teacher education, curriculum development, language and communication as well as policy-planning and analysis.

The CARICOM Advisory Task Force on Education contends that to make sound decisions on such concerns it would be inappropriate to rely on hunches and popularly held beliefs about education and, therefore, it has proposed research in the following critical areas of concern in the educational sector.

Educational administration. The action-oriented research proposed in this area will involve observation and documentation of administrative practices that work in a particular context. The findings from this set of research projects will supplement data from other completed and on-going research activities on various aspects of educational administration.

Moreover, the research in this area will guide reforms in educational administration aimed at achieving the growth and qualitative development of the educational system to support economic, social and cultural development, and efficiency in the operation of the education system while maintaining the humane characteristics of the operations.

Teacher education. The research proposed in this area is intended to find answers to questions such as: (a) how to establish and maintain a core of competent, dedicated and highly-motivated educators, marked by the appropriate mix of skills, abilities, attitudes and cultural sensitivities needed for the preparation of a citizenry that must cope with the challenges of life; (b) what recruitment and selection strategies are necessary to obtain this mix; and (c) what strategies for the development of the environmental and institutional cultures in schools and other establishments would nurture the skills, abilities, attitudes and cultural sensitivities identified in the desired mix.

Innovative curricula. The research in this area will involve the documentation of certain innovative curricula in the region. Changes are taking place so rapidly in the environment that the curriculum design process itself needs to be studied so that provisions are made to facilitate the development of appropriate responses to the changes. The work in this area should also facilitate the development of curricula that will provide for the acquisition of communication, numeracy, enquiry and life skills as well as skills in retrieving and evaluating information.

Language and communication. This priority area will involve research in literacy issues. While there is on-going research in literacy in the region, there is no common definition and accurate account of literacy here. More research will provide greater knowledge and better understanding of the problem. Research in this area should also facilitate the development of policies and programs that would stem the flow of illiterates from the school system.

The use of the media, as content and technology, is also included in this priority area. Research findings here should facilitate the development of programs aimed at fostering the skills in critical thinking necessary for learning from the content transmitted through the popular media.

The education of people outside the formal system is also a concern addressed under this research area. Research findings should inform policy and programs necessary for this group (composed mainly of adults) group to acquire critical contemporary knowledge.

Policy-planning and analysis. The region faces the dilemma of balancing the imperative of quality education against the reality of harsh structural adjustment policies. Innovative strategies are therefore required in plans for the financing of education and the administration of the educational sector, but there is little research being done in this area by educators themselves. There is an increasing awareness of the need for educators to participate in the development and analysis of fiscal and other policies that have an impact on the educational sector. The research proposed in this area should provide an analysis of policies, the identification of the needs of educators in policy-planning and analysis, and recommendations for strategies to meet those needs.

Dissemination and utilization of research findings

Researchers in the region have attempted to establish systems for sharing information about research activities. In a small region like the Caribbean, researchers and professionals form a relatively close-knit group who depend mainly on unofficial contacts for intellectual support and dialogue. Attempts have been made at both regional and national levels to bring researchers and policy-makers together, but these efforts have been sporadic, due mainly to lack of continuity in funding and the absence of a coordinating body.

Researchers from the University of the West Indies have, however, been active in disseminating their research findings. Results of research are published in international and regional journals. Of the approximately twenty-eight journals giving coverage to regional research, three are major journals: *Social and Economic Studies*, *Caribbean Quarterly*, and *Caribbean Journal of Education*. Publications in these journals carry weight in consideration for appointments and promotions at the university. The other journals, according to Miller (1984:136), reflect "a positive sign of increased activity in the field of education and educational research and a growing tendency of educators to communicate with each other through local journals."

Findings from other research institutions are also disseminated through publications in journals or occasional papers. In some cases, however, the research work done by the Ministries of Education is not published because of the political sensitivity of the data collected.

Seminars and colloquia are also used for sharing research findings. Seminars for teachers assist teachers in utilizing relevant findings in the classroom. More seminars are necessary, not only for the dissemination of research findings, but also for orienting teachers, principals and administrators towards thinking of the school or the classroom as a laboratory, and for facilitating the development of their research skills. The lack of resources and the fact that many researchers have other responsibilities are constraints on conducting these seminars more often. In addition, the UWI and other institutions hold regional conferences at which research work is presented. The Caribbean Studies Association (CSA), comprising professionals from a variety of disciplines is a regional organization with membership from the non-English-speaking and Latin American countries. This association annually convenes regional conferences, the most recent of which was held in May 1991 in Havana, Cuba.

NIHERST convened a regional conference on foreign language teaching in July 1991 in Port of Spain, Trinidad and Tobago. In August 1991, the Association of Science Educators in Trinidad and Tobago (ASETT) organized an international conference on science education in Trinidad and Tobago. These international, regional and national conferences provide an opportunity for the networking of researchers.

The media also play a role in disseminating information about research activities, but this is not usually done in a systematic and on-going manner. Researchers and research institutions need to cultivate links with the media so as to reach a larger audience, for it is recognized that the media have great potential in facilitating the development of desirable attitudes towards research and in promoting the use of empirical evidence. It should be noted that some of the major print media in the region give financial support to qualified researchers at the University to conduct polls, the results of which generate a great deal of informative debate about social, economic and political issues.

The support institutions necessary for sustaining research activities and facilitating access to research findings are libraries, documentation centers and computer facilities. Of the three, the library services in the region are the best developed. However, these services need to be further developed and strengthened in almost all the research institutions. There is also a need for more regional documentation centers which can serve as focal points from which information on educational issues can be accessed.

Computer facilities supporting research activities also need to be strengthened. The introduction of appropriate software and the training of more researchers to use the computer in research projects are urgently required. The strengthening of computer facilities will also facilitate the development of a research data base, now a top agenda item at several research institutions.

In general, then, while teachers, policy-makers and users generally have access to research findings, systematic strategies are necessary for improving this accessibility.

Strengthening regional research capacities

This paper has highlighted the mechanisms and basic infrastructural elements that are in place for the continued development of educational research in the Caribbean region. The issues raised emphasize the need for better coordination and management of research at regional and national levels and the general development and strengthening of the research capability in the region.

Some specific needs which have been identified are:

a) the development of national/regional policy for research;

b) the provision of resources for systematic and effective networking of researchers to share information and engage in multidisciplinary research;

c) the establishment of a regional body of researchers;

d) the development of strategies for more effective dissemination of research findings;

e) the strengthening of the support services for research;

f) the improvement of research activities in classroom observation, experimental, longitudinal and action-oriented research;

g) the development and strengthening of the research skills of teachers;

h) the provision of assistance for students to enter graduate programs which incorporate research methodologies; and

i) the orientation of policy-makers towards the value of research and development of strategies for linking the research and decision-making processes.

Moreover, and perhaps most importantly, to develop and strengthen research capacities in the region, there is the need to develop an indigenous capability in terms of trained researchers, for as Carrington (1981) explained:

> . . . we have the foreknowledge that problems will never be eliminated from human societal existence and education is not exempt from that blight. The application of research to any educational task is intended to keep practices as near to ideal as possible in the full knowledge that the relationship between the state of education and the state of research or knowledge can at best only be a dialectical relationship. Unless therefore, the cadre of core researchers is evolved within the environment of the research task, the dialectical process will be intermittent rather than continuous.

The nucleus of researchers in the Caribbean region has managed, despite several constraints, to promote research as a necessary activity for the acquisition of knowledge that can be utilized in confronting challenges

implicit in national and regional development. Given the rapid environmental changes taking place globally there is urgent need to widen the community of researchers in the region, who will help point the direction to a more equitable society.

References

Bourne, C. 1988. *Caribbean Development to the Year 2000: Challenges, Prospects and Policies.* Commonwealth Secretariat, London and CARICOM Secretariat: Georgetown, Guyana.

Broomes, D. 1981. *Report on Educational Research in Trinidad and Tobago.* Trinidad and Tobago: Multimedia Production Centre, School of Education, University of the West Indies (UWI).

CARICOM. 1989. Report of the First Regional Consultation on the Future of Education in the Caribbean. Georgetown, Guyana: CARICOM Secretariat.

Carrington, L. 1981. *Report on Educational Research in Trinidad and Tobago.* Trinidad and Tobago: Multimedia Production Centre, School of Education, University of the West Indies (UWI).

Miller, E. 1984. *Educational Research: The English-Speaking Caribbean.* Ottawa: International Development Research Centre (IDRC).

Appendices

Appendix I: Agenda

Thursday, 12 September 1991

09:30 Welcome to participants and opening
The purpose of the meeting
Agenda and working procedures of the seminar
10:30 Coffee break
11:00 Presentation of regional papers
12:30 Lunch
14:00 Presentation of regional papers
15:30 Tea break
16:00 Presentation of regional papers
17:30 Close of activities
19:00 Reception at Stockholm's City Hall

Friday, 13 September 1991

09:30 Working Group Sessions
* Critical issues of development and priority areas for educational research

10:30 Coffee break
11:00 Working Group Sessions (*Continued*)
12:00 Lunch
14:00 Working Group Sessions (*Continued*)
* Problems in the implementation of educational research

15:30 Tea break
16:00 Reports from the working groups
17:30 Close of activities
19:30 Dinner at *Spökslottet* (The Ghost Castle)

Saturday, 14 September 1991

Consolidation and Conclusions

09:00 Summation
10:30 Coffee break
01:00 Consolidating views: An International Commission on Educational Research in Developing Countries
12:30 Lunch
13:00 Meeting of drafting group
15:00 Final plenary session
16:30 Close of activities

Composition of the Working Groups

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Arfah Aziz
Miala Diambomba
Ingemar Fägerlind
Johanna Filp (*rapporteur*)
Mats Kihlberg
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